THE ECONOMIC RESOURCES OF THE EMPIRE

A SERIES OF LECTURES DELIVERED AT THE POLYTECHNIC, REGENT STREET, LONDON, W.1

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LONDON
SIR ISAAC PITMAN & SONS, LTD.
PARKER STREET, KINGSWAY, W.C.2
BATH, MELBOURNE, TORONTO, NEW YORK
1927

PRINTED IN GREAT BRITAIN
AT THE PITMAN PRESS, BATH

PREFACE

THE lectures that follow are an appendage and a supplement to the Imperial Conference held during the autumn of 1926. One of the most important results of this great Conference was the clear recognition of the benefit to be derived from greater co-operation in trade and industry among the constituents of the Empire. The Polytechnic authorities, anxious to promote effectively such co-operation, were able to obtain the services of lecturers with personal and adequate knowledge of the countries about which they spoke. The lectures were eagerly welcomed at the time; it is earnestly hoped that their publication will enable very many others than the listeners to realize how great a heritage the British people have in their Empire.

T. W.

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THE ECONOMIC RESOURCES OF THE EMPIRE

THE ECONOMIC POSITION OF GREAT BRITAIN

THE United Kingdom contains over 40,000,000 people. It contains approximately as many people as it has acres of land, and many of these acres are barren mountain and moorland, useless for food production. And each year 250,000—a town's folk equal to that of the London of Elizabeth—is added to the crowded populace. How is that growing family to be maintained, and maintained in a constantly rising standard of comfort? There is the problem that the statesman, who is the economist in practice, has ever before him.

TRADE A VITAL NECESSITY.

The conditions of the problem are familiar to all of us. And these conditions have been given definite shape by two admirable reports surveying overseas markets and industrial relations. These are the reports just published of the Balfour Committee on Overseas Markets. We do not and cannot produce from our soil more than one-fifth of the food we must have. We do not and cannot produce in our land the bulk of the materials for our staple industries. We must buy these or perish. We buy them with our exports, visible and invisible; and these exports must be marketed at a price which our foreign customers, the

sellers of the supplies, are able and willing to pay. Trade may be to other people a luxury, an added comfort; to us it is a vital necessity. We have sought and found prosperity through trade, and we have thereby given up the stability of land. Till a century and a half ago our well-being consisted in having a bountiful, not a niggardly, harvest. Our well-being now consists in briskness of trade, in the eagerness of other peoples to buy our goods and pay for our services. For we have no "tributary" states; and foreigners are not generous enough to send us something for nothing.

Our dependence upon trade appears to some to involve grave dangers. The Great War in its last stages resolved itself into a kind of race between the plough and the submarine, the tortoise and the hare. We had to make every effort to increase the growth of food at home; for the enemy was making every effort to cut off supplies from overseas. Upon these supplies we rely. When the great manufacturing innovations of the Iron Age had made Great Britain the workshop of the world, we saw that we could feed ourselves far more easily by working in our factories than by working in our fields; and, ever seeking the less laborious method, we as a nation relinquished farming and built iron works and cotton mills. For an hour's work at the loom or the lathe would command the product of many days' work on the wheat fields of America, in the forests of Africa, on the hill slopes where tea and coffee grow in Asia. But are we to acquiesce in Mill's melancholy conclusion that these and other mechanical inventions have not lightened the day's toil of a single human being? Mr. Keynes expresses the matter thus—

> As numbers increased, food actually became cheaper; more emigrants were available to grow food abroad, and more workmen were absorbed in Europe in the production of the

agricultural machinery and of the steamers and railways that enabled the food to be produced and carried home for their consumption. During the latter half of the nineteenth century, a unit of labour applied to industry in Europe could be exchanged for a steadily increasing quantity of food.

Our Position To-day.

How, then, does it stand to-day with us? One thing at any rate we can be quite certain about. We no longer enjoy so strangely favoured a position as we did during much of the nineteenth century. Then we were the one great manufacturing people of the world. For of our country alone in Europe it could be said that they enjoyed security. Those who laboured could rely upon reaping the fruits of their labour. Those who had built factories or workshops or railways could be certain that the profits of their investments would not be filched from them, and that the undertakings brought into being by their money would not be destroyed as an incident of war. In America, the wonderful natural resources that have made the United States the chief wealth-producing unit in the world had been very little used. The great continent was as yet like a magnificent ship with an inadequate crew. In Asia, Japan had not awakened so as to become a formidable trade competitor. We had something like a seller's monopoly. A bale of our cloth, a case of our machinery, brought us an extraordinary amount of the food and the raw materials that other lands were eager to exchange for them. We were, moreover, the one great market for the surplus crops of other lands: we had, that is to say, a kind of buyer's monopoly also. There never can be again such a monopoly of the best business of the world as we had during much of the nineteenth century. So easy was food to get that our population grew like crops on a newly irrigated desert, and quadrupled itself in a century.

Things are different now. Inventions and knowledge and skill—once our peculiar possessions—are common to the world. The differential advantages we once enjoyed have disappeared. In certain respects, indeed, we compete with the handicap against us. Our manufacturers enjoy no monopoly. And other crowded regions have arisen—in France, in Germany, in Belgium, in the United States—unable to grow their own food or to produce their own raw materials. These compete with us for the supplies available. "Europe's claim on the resources of the New World was becoming precarious; the law of diminishing returns was at last reasserting itself and was making it necessary year by year for Europe to offer a greater quantity of the commodities to obtain the same amount of bread." Instead of there being a single great manufacturing and trading nation, all the others being growers of corn, or sources of materials, there are many eagerly competing nations. This is no hardship to us. It ought rather to be a stimulus to greater exertion on our part. A trader would have his customers wealthy, not poor; and a trading nation need not repine because nations that buy much can also give much in return.

Return to Isolation Impossible.

Nor ought we to expect other countries, including the Overseas Dominions, to be content to remain with the capacities of their land and their people undeveloped. They, too, seek to have manufactures and trade; and we must, therefore, adjust ourselves to changes. We cannot put the clock of history back; however much we wish, we cannot go back to what some imaginative people call "the good old days." Then it was that everyone lived of his own. He had no need to trade, no need to unite with his fellows in a society of mutual help. The poet, looking with regret from the

complications of modern life to a simpler state of things, says—

> Happy the man whose wish and care,
> A few paternal acres bound,
> Content to breathe his native air
> In his own ground.
>
> Whose herds with milk, whose fields with bread,
> Whose flocks provide him with attire,
> Whose trees in summer yield him shade,
> In winter, fire.

The pretty picture has never been realized. What little we know about the old days is very far from justifying our calling them good. In these small islands, peopled by so many millions, the poet's picture certainly could not be realized at this late period of time. The recent instance of the Patrington experiment seems conclusively to prove that with the best will in the world, with the greatest stretching of outside help, the peasant farmer cannot make a living here. At Patrington, you remember, the Ministry of Agriculture took over a piece of Crown land, farmed by about fifty people, and organized it as small holdings, upon which 2,500, including many ex-service men, were settled—a practical application of what Mr. Galsworthy, in *The Silver Spoon*, called Foggartism. After heavy losses, the experiment has been abandoned. The solution of the statesman's problem—how to maintain his growing family in a constantly rising standard of comfort—does not lie here. There can be no restoring of the so-called "Merrie England" of the manorial period—even if it were desirable to do so. Mr. Wells, in *The World of William Clissold*, vigorously deprecates such a return. Speaking of the picture presented by many historians, he says—

> Fairyland it was, a Scholar's Fairyland, secure and aloof from that dark wilderness which is history. For think of what those days were in reality, the life in fortresses and castles, the towns like criminal slums, the houses crowded

together and locked and barred and fortified against each other: bodies unwashed and clad in dirty and coarse woollens as the finest wear, brutish communes here and reigns of terror there, gangs in possession, monasteries and nunneries illiterate and remote, sheer naked savagery in many districts, and mud-tracks through the unkempt roads between the towns, not a road except for some Roman highway in decay, not a bridge except by way of atonement by some powerful dying sinner, fierce dogs upon the countryside, hogs and stench in the streets of the cities, pestilence endemic. And endless breeding of children there was, to fester and die for the most part before ever they grew to youth's estate. Here and there would be a region where some accident of natural kindliness gave life a little space of April sunshine; here and there perhaps one might find a tolerant equilibrium of lazy lassitude, some lord or abbot in tidy or genial mood. A little space at most and a transitory phase it was in the ugly succession of cramped, distressful lives.

We have committed ourselves to trade for our livelihood: brisk trade means prosperity for us, slack trade means adversity. Our outlook at the moment—what with industrial troubles and poverty-stricken nations—is certainly one of gloom. Here, for instance, is a passage written by a keen-eyed observer who is not afraid of saying what he thinks. Dean Inge writes—

The future is likely to be with the large countries; England is as much too small in comparison with the great aggregations of population in Asia and America as Holland was in the Europe of the seventeenth century. We have reached, and even passed, the optimum number of our population; any further increase would be only a source of weakness, whereas the American countries are still expanding healthily, and Eastern Europe is not yet full. We are no longer invulnerable at home, and sea-power will probably be rather less important in the future than in the past. The greater security of America will alone be enough to give her a decisive advantage in our competition with her. It seems then, for every reason, unlikely that our position as a world-power, which was made possible by a combination of circumstances which are no longer operative to the same extent as formerly, and which were taken advantage of and used to the full by the wonderful energy and ability of our countrymen, will endure much longer. The prospect is unwelcome to a patriot. But we

may reflect with pleasure on the steady growth of the Dominions into great and powerful nations, speaking our language and cherishing our traditions. Whether these nations will be willing to contribute much to strengthening the position of the Mother Country in Europe is doubtful; but racially, the prospects of the English stock seem on the whole to be more favourable than those of any other. Our great good fortune in being the first to occupy the best parts of the newly-discovered continents may, if we are wise and resolute, enable the English-speaking peoples still to hold the first-place among the races of the world. Much will depend on the friendliness of the United States, on which we certainly cannot count, but of which we need not despair.

The White Problem.

But the future of the English-speaking races depends very largely on a problem which has not yet been decided. Will supremacy fall to those nations which, like the Anglo-Saxons above all others, have established a high standard of living, with varied and abundant food, comparatively short hours of work, many amusements and comforts of every kind, or to the cheaper races, who are accustomed to a simpler manner of life, and make fewer demands upon their environment? At present, the high-standard races have the upper hand. Countries like Australia, New Zealand, and the United States are called, and wish to be called, the paradise of the working man. Now it is the almost unanimous opinion in those countries that their high standard of living, their short hours and high wages can be maintained only by the forcible exclusion of Asiatic labour. This rigid exclusion is regarded as a matter of life and death to the white man. In other words, they admit that the Asiatic gives better value for his wages than the European, and that under a system of free competition he would make it impossible for the white man to exist. This is not disputed; force must be used to protect the "higher" civilization from peaceful penetration by the "lower." The question is whether this new Chinese wall will be in the long run more successful than the wall which the Chinese built to keep out the northern nomads. All talk of disarmament seems to be futile so long as peaceful penetration would mean the submergence of the whites.

Our gloom, though, need not be by any means unmitigated. In particular, as Dean Inge himself points out, the full effect of Empire co-operation may be great.

And a vivid idea of how we as a nation live will help to betterment and prevent Ruskin's foreboding from being realized. He began his book, *The Stones of Venice*, you may remember, in this doleful manner—

Since first the dominion of man was asserted over the ocean three thrones, of mark beyond all others, have been set upon its sands: the thrones of Tyre, Venice, and England. Of the First of these great powers only the memory remains; of the Second the ruins; the Third, which inherits their greatness, if it forget their example, may be led, through prouder eminence, to less pitied destruction.

The exaltation, the sin, and the punishment of Tyre have been recorded for us, in perhaps the most touching words ever uttered by the Prophets of Israel against the cities of the stranger. But we read them as a lovely song; and close our ears to the sternness of their warning: for the very depth of the fall of Tyre has blinded us to its reality, and we forget, as we watch the bleaching of the rocks between the sunshine and the sea, that they were once "as in Eden, the garden of God."

Her successor, like her in perfection of beauty, though less in endurance of dominion, is still left upon the sands of the sea, so weak—so quiet—so bereft of all but her loveliness, that we might well doubt, as we watched her faint reflection in the mirage of the lagoon, which was the City and which the Shadow.

Recovery in Other Days.

Our country has recovered from other shocks. After Waterloo there were the same lamentations over slack trade. Here is one expressed in rhyme—

No foreign barks in British ports are seen,
Stuffed to the water's edge with velveteen,
Or bursting with big bales of bombazeen;
No distant climes demand our corduroy,
Unmatched habiliment for man and boy;
No fleets of fustian quit the British shore,
The cloth-creating engines cease to roar,
Still is that loom which breeched the world before.

There were growls similar to those we hear now over excessive and oppressive taxation:

Taxes upon every article which enters into the mouth, or

covers the back, or is placed under the foot—taxes upon everything which it is pleasant to see, hear, feel, smell, or taste—taxes upon warmth, light locomotion—taxes upon everything on earth, and the waters under the earth—on everything that comes from abroad or is grown at home—taxes on the raw material—taxes on every fresh value that is added to it by the industry of man—taxes on the sauce which pampers a man's appetite and the drug that restores him to health—on the ermine which decorates the judge, and the rope which hangs the criminal—on the poor man's salt, and the rich man's spice—on the brass nails of the coffin, and the ribands of the bride—at bed or board, sleeping or waking, we must pay. The schoolboy whips his taxed top, the beardless youth manages his taxed horse with a taxed bridle on a taxed road, and the dying Englishman, pouring his medicine which has paid 7 per cent into a spoon that has paid 15 per cent, flings himself back upon his chintz bed which has paid 22 per cent, makes his will on an £8 stamp and expires in the arms of an apothecary who has paid a licence of £100 for the privilege of putting him to death. His whole property is then immediately taxed from 2 to 10 per cent. Besides the probate, large fees are demanded for burying him in the chancel. His virtues are handed down to posterity on taxed marble and he will then be gathered to his fathers to be taxed no more.

Our Mercantile Supremacy.

We recovered then and reached a mercantile supremacy such as Venice never knew, such as no other state will again know. True, conditions are different now, different in regard to both the creation of wealth and its destruction. In regard to the latter this interesting comparison makes things clear: it is from Mr. Hawtrey's book on the *Economic Problem*—

War has acquired a new and dreadful meaning in the twentieth century. It has become possible as never before in the world's history to concentrate the resources of a country, human and material, in the single task of wielding organized force. Warlike equipment has become more complex, expensive, and destructive. But the essential changes are rather the improvements in transport and in finance. Mechanical transport by rail, road, and sea makes it possible to assemble and feed and supply far greater numbers. The modern organization of investment markets and money markets,

national and international, enables the government to get into its hands a far greater command over the available stock and output of wealth than ever before. Thereby it can set free all the more men from productive operations for military services. Napoleon in 1812 controlled all continental Europe except Russia and a part of the Spanish peninsula, and far the greater part was under his direct rule. The man-power which it was possible for him to distil from these vast dominions provided him with an army of only 500,000 men. By the time he reached his enemy at Borodino he had 120,000 men with him. That was the limit of the real fighting force that all Western Europe could put before Moscow in the days when armies travelled on their feet and were supplied by horse transport The material harm war could do in those conditions, great though it was, was limited.

Nowadays every civilized nation has the power to exhaust its resources in war, and there is no certainty that a decision will be reached short of absolute exhaustion. Europe was desperately near that stage in 1918.

Possibility of Speedy Recovery.

The conditions are different for good as well as for ill; recovery should be as speedy and as great as destruction may be. The Dominions and the Empire have grown up into an effective League of Nations, and our relations with them count for much. Australia and India are now as accessible as was the South of France a hundred years ago. And we are rapidly becoming consciously aware of the need to foster co-operation between the Mother Country and the Dominions. Each has what the other wants; linked into a society of mutual service the prospect for us here and our fellow subjects overseas cannot but be favourable. In 1918, when the Imperial Conference took counsel together in expectation of the close of hostilities, a declaration was made—

> The time has arrived when all possible encouragement should be given to the development of Imperial resources, and especially to make the Empire independent of other countries in respect of food supplies, raw materials, and essential industries. With these objects in view the Conference

expressed itself in favour of the principle that each part of the Empire, having due regard to the interest of our Allies, shall have specially favoured treatment and facilities to the produce and manufactures of other parts of the Empire.

In the spirit of this resolution we have a substantial preference given by this country to colonial goods and a substantial reduction in custom rates on United Kingdom manufactures entering the Dominions. We have also what is especially to be encouraged, definite schemes of settlement in the countries clamouring for the right kind of settler—settlement, not haphazard, but carefully thought out, of settlers who have already had preliminary training, who are not too old to settle in the country and give up the excitement of the town.

A great empire and little minds go ill together. If we are conscious of our station and glow with zeal to fill our places as becomes our situation and ourselves, we ought to elevate our minds to the greatness of that trust to which the order of Providence has called us. By adverting to the dignity of this high calling, our ancestors have turned a savage wilderness into a glorious empire ; and have made the most extensive and the only honourable conquests, not by destroying but by promoting the wealth, the number, the happiness of the human race. These are the sole conditions under which little England can maintain her almost miraculous and always precarious greatness ; and without them our hard-won liberties hang on a slender thread. Only a nation which is one in spirit can remain free.

(*Lecturer :* W. J. WESTON, M.A., B.Sc.)

THE ECONOMIC POSITION OF CANADA

I SHALL try and confine myself in a general way at least to the economics of Canada. It is rather an impossible task, for the economics of Canada—except in a comparatively limited degree—constitute an unknown quantity. Only the other day I read in a Reuter's cablegram a statement that certain explorers in Northern Ontario had come across a lake 180 miles long and teeming with fish, the existence of which had not hitherto been known.

That justifies the assumption that all we know of the economics of Canada must be confined to a limited space, for if we are in a country where we unexpectedly come across a sheet of water as long almost as the distance from London to Liverpool, then our knowledge of its natural economics must be very limited.

It is quite true to say that we Canadians know comparatively little about our own country. Its visible resources have only been scratched, and what we believe to be its potential resources are beyond the dreams of avarice, and every attempt we have made to penetrate into the unknown has resulted in discoveries of incalculable wealth of almost every kind.

CANADA'S POSSIBILITIES.

But, supposing we confine ourselves not to the potential resources but to what are known as the actual resources, we shall find that Canada is just on the threshold of the most amazing possibilities in the production of wealth. Even in the economics of

Canada it is not necessary to assume that the production of wealth is the greatest quality that Canada needs, but it will be interesting to have a brief review of our economic resources as revealed by her developed and partially-developed wealth.

CEREAL-GROWING WEALTH.

For the purpose of understanding something of Canada's cereal-growing wealth, let us confine ourselves for a moment to the three Prairie Provinces of Manitoba, Saskatchewan, and Alberta. In these Prairie Provinces there are over 300,000,000 acres of arable land fit for the plough and cultivation, of which only 60,000,000 acres are in actual occupation, and not more than from 40,000,000 to 45,000,000 acres out of that 300,000,000 acres producing grain crops of any kind.

Last year, and I suppose again this year, these Prairie Provinces produced approximately 400,000,000 bushels of wheat at an average price of 5s. per bushel.

Last year the Western States of the United States produced altogether about 600,000,000 bushels of wheat from a population of about 50,000,000 people; whereas the Prairie Provinces of Canada, from a population of slightly over 2,000,000 people produced about 60 per cent of the total wheat production of the United States.

It is estimated that the total agricultural production of Canada in a given year, i.e. the products of the farm and farm animals, approximates about two billion dollars. I am speaking of Canada as a whole. That is, in sterling currency, about £400,000,000.

And you will notice, by the way, that if this wealth was taken out of the forests, generations would have to pass before it could be reproduced; if taken out of the mines of Canada it probably could never be reproduced; but taken out of the soil of Canada it is practically reproduced year by year, and so forms a

constant source of wealth that is produced at a lower cost than, perhaps, in any other country in the world.

While it is not necessary to stress the cereal wealth of Canada, it may be of interest to know that last year Canada increased its shipments to all countries by 128,698,000 bushels of grains of different kinds at a value of nearly £35,000,000 (sterling).

The total exports in grain amounted to 275,557,000 bushels, worth £80,261,000.

Of the total Canadian cereal exports, Great Britain was the principal purchaser, taking 198,402,000 bushels, or about 70 per cent of the whole.

As an evidence of the remarkable growth of these Prairie Provinces of Canada in the wheat yield during the last twenty years, I may mention that in 1905 the Prairie Provinces produced 95,837,000 bushels of wheat, whereas in 1925 they produced over 383,000,000 bushels of wheat.

OTHER PRODUCTS.

I have given you something of the total agricultural products of the farms of Canada, but do you realize that, important and all as our wheat and other grain production was, it was exceeded in 1925 by the manufactured products of our forests, and almost equalled by the products of our mines, although they are still as greatly undeveloped as our grain fields?

Canada is the world's greatest producer of newsprint. In 1913 she produced 350,000 tons, and in 1923 1,550,000 tons, an increase of considerably over 400 per cent.

Canada produces 90 per cent of the world's cobalt, 88 per cent of the world's asbestos, 80 per cent of the world's nickel, and she is the third greatest gold producer in the world.

The Porcupine gold camp, discovered in 1910, had paid in dividends up to July last over £9,000,000, while

gold at the rate of £500,000 (sterling) per month is being produced from the area.

It is believed that in 1930 the gold product of this area will reach about £10,000,000 per year. One mine (Hollinger) produced last year £3,000,000 worth of gold, with net profits of £1,320,000.

PULP.

Something should be said about Canada's pulp products. In the pulp-wood region around Lake Nipigon developments are taking place that will involve a capital expenditure at the head of the lakes of about £10,000,000. The Ontario Government itself recently announced completion of agreements in connection with new pulp and paper enterprises that will mean the spending of £16,000,000 within the next two years.

The largest pulp and paper mill in the world is now being erected at Iroquois Falls, near Lake Abitibi. The completion of this mill will add a daily increased capacity of 2,250 tons of newsprint.

The enormous consumption of newsprint in the 48–50 page newspapers, particularly produced in the United States, will so draw upon pulp and paper manufacture as to destroy our forests of pulp-wood, so that unless there is an immediate reduction in the size of our newspapers and magazines, something other than pulp-wood will be necessary to provide an adequate supply of newsprint if the present size newspapers are continued.

WATER-POWER.

No review of economics of Canada would be complete without reference to the marvellous wealth she has in her water-power, and the extraordinary steps she is taking for its development.

The waterfalls of the Province of Quebec alone are

producing 4,000,000 horse-power of electricity, and it would take 50,000,000 men to produce an equal amount of energy. In addition to this, Quebec has also 4,000,000 horse-power still awaiting development.

In the great districts of Northern Quebec, in the country we used to know as " Ungava," largely unexplored, there are mighty rivers and reservoirs, the potentialities of which are beyond our power to imagine. Only recently a great fall was discovered with a drop of 800 ft.

Farther west, in Manitoba, along the mighty Nelson and Churchill rivers, as great as the St. Lawrence, as majestic as the Mississippi, and as broad and long as two or three Hudsons, yet unknown to the average reader, there lies available for the uses of manufacture over 4,000,000 horse-power.

ELECTRICITY.

To those who wonder what we are going to do when the world's coal supply gives out, let me ask them to take courage and think of electricity. Niagara Falls is the largest hydro-electric power plant in the world. It is distributing power wholesale to over 400 Ontario municipalities, and supplying power and light not only for the towns and villages, but power for use in the household and in the farmyard.

Electricity is the most beneficent labour-saving device yet discovered, and Canada is 100 per cent ahead even of the United States in the use of electrical current. Our American friends have long since recognized this, and are constantly endeavouring to negotiate for a supply of Canadian electric current to be sent over the boundary lines to their plants in the United States. Henry Ford, for instance, is having electric current sent from the Canadian side 700 miles to his works in Detroit, and many of the American industries in New England and the neighbouring States would

give a fabulous amount if they could secure 2,000,000 horse-power from the neighbouring province of Quebec.

It is said that the use of power in America enables the average American-Canadian workman to produce the equivalent of $3,750 per year, as against $1,500 per year in Great Britain. And, as you know, wages are paid out of what men produce.

ECONOMIC INVESTMENTS IN CANADA.

But what of the economic investments in Canada? Where do they come from, and in what proportions? Can patriotism and business be mixed, or must they be run along separate lines?

It is merely a statement of fact to say that the United States is finding a profitable source of investment in Canadian bonds of every description. One-fourth of all the securities in Canadian corporations and joint-stock companies are owned in the United States, and one-tenth in Great Britian. One-fourth of all the foreign investments of the United States are located in Canada, including 1,200 branch factories.

This is a very interesting, and, if you like, a rather alarming statement. One-fourth of all the foreign investments of the United States are located in Canada.

It is reported on excellent authority that the investments of the United States in the Dominion of Canada to-day represent £600,000,000 (sterling), while the investments of Great Britain in Canada to-day represent £500,000,000.

No part of this address, of course, can trench upon the domain of politics, but the peaceful penetration of the Dominion of Canada by the economic forces of the United States is a matter deserving our greatest and deepest consideration. All the more so when we remember that we are well able to checkmate it if we are so disposed.

An interesting report from Winnipeg states that United States citizens settling in Canada in the past twelve years brought with them into the Dominion, in cash and effects, the sum of $163,473,553. In one year nearly $26,000,000 was added to the wealth of Western Canada by these newcomers.

FOREIGN TRADE.

No survey of the economics of Canada can be complete without a reference to the striking figures contained in the reports of our foreign trade. For the fiscal year ending 31st March last, Canada's foreign trade amounted to $2,255,939,869, or $377,000,000 above the previous year.

The foreign trade of Canada has quadrupled in twenty years, and has doubled itself in the last ten years.

The year before the war, Canada's foreign trade had reached $530,000,000. It has now reached $2,255,939,000.

Canada's foreign trade is mainly with Great Britain and the United States. Last year she exchanged goods with the United States to the value of $1,095,680,246, or nearly one-half her total external trade; while she exchanged goods with Great Britain to the amount of $672,988,590. In the former case the increase for the year was 16·9 per cent, and in the latter case 22·8 per cent.

It is not uninteresting to note that the favourable balance of trade in favour of Canada, i.e. the excess of exports over imports, reached the sum of $401,000,000, and is a higher *per capita* excess of exports over imports than that of any other country in the world.

IMMIGRATION.

One cannot leave the subject of Canadian economics without a reference to immigration, both from a British and from an overseas point of view.

Unfortunately, I suppose we may say the supply of agriculturists and agricultural labourers from Great Britain is very limited, due to the fact that Great Britain is an industrial and not an agricultural country, but Canada nevertheless does not under-estimate their value. The Dominion Government's statisticians say that every agricultural family of five—i.e. father and mother and three children—placed upon a farm in Canada expend an annual budget of $1,500.00 (or £300) of what is produced by industrial Canada. Every additional agricultural family, therefore, placed upon the land in Canada provides occupation for one additional man in the industrial life of the community.

This is important, because our problem is an agricultural shortage, and England's problem is an industrial overplus. What are we going to do about it?

It should be noted that every Province in the Dominion of Canada, with the exception of Ontario and Quebec, shows a greater rural population than urban population, so that as a matter of fact the vast majority of the people who reside in the Dominion of Canada live in the rural areas.

Since it became a Province, twenty-one years ago, Alberta has increased its population from 200,000 to 640,000.

The area under wheat twenty-one years ago was 220,000 acres; the area under wheat this year was 6,000,000 acres. And the area under all crops rose from 616,000 to 11,000,000 acres.

The estimated value of agricultural products of this Province alone has risen from $20,000,000 to $256,000,000; and the coal production from 800,000 tons to 7,000,000 tons.

CANADIAN RAILWAYS.

During the past year the Canadian railways carried 41,258,884 passengers a distance of 2,910,760,047 miles.

The ratio of passengers killed to passengers carried was at the rate of one to every 8,025,000.

Canadian steam railways alone have a mileage of 406,351 miles. The aggregate freight train haulage was 56,122,416 miles, while the aggregate passenger train haulage was 46,300,000 miles. The total freight carried during the year was approximately 120,000,000 tons.

It is a curious commentary on our modern statesmanship that when there are two elemental facts capable of joint action and assimilation, our statesmen seem incapable of getting co-operation. Is it beyond the wit of our Dominion and British statesmanship to devise some practical plan whereby the fertile vacant spaces of the Overseas Dominions may be occupied by the virile manhood and womanhood of the congested areas of the Motherland?

I have given a good deal of study to the question of immigration generally in the last quarter of a century, and particularly to the relationship between the Mother Country and the Overseas Dominions, and I am satisfied that if there existed on the part of the statesmanship of the Overseas Dominions and the statesmanship of Great Britain a will to solve the problem, it could be solved. I certainly will never believe it is insoluble, and while I have no patience with the quack nostrums of amateur immigrationists, whose enthusiasm and zeal outrun their knowledge and discretion, yet I am sure that a well-considered and well-conceived plan, by which a great mass of those who are to-day idle, and for whom the prospects indicate no immediate future, could be taught to turn their backs upon those occupations they have followed in the industrial life of the country but which seem to them to offer no further progress along that line, and to turn their talents and aptitude into the acquirement of the rudiments of another industry which would provide ample

scope for their energy and virility, and, incidentally, a new life and home for themselves in one or other of the Dominions beyond the seas, there would be at one stroke remedial measures for the congestion and unemployment in the Homeland, a wider, broader, and more extensive cultivation in the Overseas Dominions, and, from the very nature of things, a perpetuation of the feeling of loyalty and love that we trust shall always exist between the Motherland and her Dominions. And by providing a trained and adequate stream of British migrants, capable and ready to accommodate themselves to the new Overseas Dominions, and to assimilate themselves to the customs of the country, we shall build up a barrier against the penetration of outside interests, however excellent in themselves, and deepen and strengthen the bonds that bind together the various component parts of the British Empire.

Reuter says this morning that on the eve of his departure for England to attend the Imperial Conference the Prime Minister, speaking at a dinner given in his honour, said—

> We are in the happy position of having no grievance of any kind to take to the Conference. The relations between the Dominions and the Mother Country are all that can be desired. Our one aim and purpose should be to represent Canada as a full self-governing nation, one of that commonwealth of nations we speak of as the British Empire, all united under one King, one flag, and one ideal.

(*Lecturer:* J. BRUCE WALKER.)

THE ECONOMIC POSITION OF NEWFOUNDLAND

I TAKE it the aspect of the economic position, which it is important to stress in these addresses, is the position of the great states of the British Empire, in the matter of, first, their actual and potential resources, and, second, how these resources are being developed and conserved in order that the people who live within their boundaries may be afforded a means of living, and, in addition, paying the cost of constructing and maintaining those public services and utilities, which no civilized country or people can to-day afford to dispense with. It is particularly important that the citizen of the British Isles, especially those who mould and influence public opinion, the writers of the Press, teachers, public men and clergymen, should endeavour to obtain first-hand information on these matters in order to guide the large class of the community who will, from economic pressure, be forced to leave their country and make a home for themselves in our Dominions.

For this reason the promoters of this series of ten lectures, on the Economic Resources of the Empire, deserve very special praise. They are certainly working along the right lines.

CABOT.

In the municipal art gallery in Bristol there is a picture depicting the departure of John and Sebastian Cabot from that city on their first voyage of exploration to the New World—which five years before had been discovered by Columbus. The painting shows

the Mayor of Bristol bidding farewell to John Cabot on his setting out in his little ship, the *Matthew*—of probably less than 100 tons—on his memorable voyage of discovery, 2nd May, 1497. Between the Mayor and John Cabot is seen Sebastian, holding the Charter granted by Henry VII. Behind the Mayor stands John Cabot's wife, consoled by a nun. In the foreground, acolytes on either side, holding his mitre and candles, is Abbot Neuland, attended by a deacon. Between the abbot and the deacon are seen various citizens of Bristol, and in the distance an immense crowd witnessing the departure. The mainsail of the *Matthew* is, in accordance with the fashion of the time, emblazoned with the city arms. It is a beautiful, entrancing picture showing the solemn, serious, religious way in which great undertakings were launched in those days. The dignitaries of the Church were present to bless the undertaking, for citizens of this great city of Bristol are about to go out on an uncharted ocean—it may be to discover new worlds.

On this memorable day, then, 2nd May, 1497, this little ship, with the *Matthew of Bristol* painted on her stern, sailed with a crew of eighteen stout-hearted west country sailors—the men that Queen Elizabeth said were the men of Devon, her right hand. For fifty-two days this small craft battled with storm and wave, and fog and ice, and ultimately, on the 24th of June, reached the Newfoundland coast, now known as Bonavista, and added the first overseas possession to the British Crown.

Early Settlement.

Fascinating as any romance is the story of the early settlement of Newfoundland and its share in Empire making. From its discovery in 1497 to the first decade of the seventeenth century, the "New Isle" was the sole foothold of the British in the western

hemisphere; the one part of ground they claimed outside the British Isles. In this remote island the English tongue was first spoken amid trans-oceanic surroundings; the English flag first floated above an overseas province; and the English race first set itself to the task of subduing the forest. The lessons of Empire were learned on its shores and the Viking spirit nurtured by its breezes. The mastery of the seas was acquired by battling with its billows, and the vast colonial territories now girding the globe have an origin in the fishing plantations established around its seaboard.

Newfoundland was the nursery of the colonial conception, the precursor of the American Republic, the Dominion of Canada, the Australian Commonwealth, the South African Federacy; as well as the lesser colonies where the civilizing genius of the Anglo-Saxon race finds an outlet for its energies.

The genius of the imperialism of later days, the instinct of expansion as we now see it, took shape in this land, then regarded as a lonely rock in the vast Atlantic, but now seen to be a region generously dowered with natural resources.

Prime Minister's Statement.

As you will have noted by the public statement, published a day or two ago in the *Financial News*, made by the Prime Minister of Newfoundland, the Hon. Walter Monroe, the economic position of Newfoundland is sound. Mr. Monroe says—

> Our budgetary situation may be regarded on the whole as satisfactory. Last year there was a revenue surplus. . . . The war has cost us about $30,000,000. We have, nevertheless, maintained our high credit, and both London and New York are ready markets for our loans.
>
> In order to develop our resources, Mr. Monroe continued, we need external financial aid. The Motherland is taking a considerable interest in our development, and the United

States is also keeping a watchful eye on us. American interests play an important rôle in our pulp and paper industry.

This testimony from the Prime Minister of Newfoundland pays just tribute to the sterling character of her people. When we realize that a small population, 260,000, not as many as the population of one of the large provincial towns in England, keeps up and maintains for the use of its inhabitants all those public services and utilities necessary for the trade and business and convenience of its people, who are ever anxious to keep abreast of the times and participate in the advantages and blessings of civilization, one realizes what they have done. This small population last year put their hands in their pockets and spent something like $10,000,000 in public services, such as: education, pensions, including the war, civil service, old age and civil pensions, public charities, such as hospitals and relief of the poor, marine and fisheries, including lighthouses and wireless and piers, justice and police, roads, docks, and railways. What the people of Newfoundland have done in this respect is the most heroic achievement of any people I know of.

If, to-day, Newfoundland had ten times its present population, say a population of 2,500,000, many of these public services would not require to be extended, such as lighthouses, telegraphs, piers, railways, public buildings, docks, schools, and public roads; and instead of requiring Government subsidies to maintain them, would be services of profit in many cases for the State or the private companies that operate them. I make this statement to show what an attractive country Newfoundland is for the intending emigrant, and as ample proof of what a rich country it is, when we see that in less than 100 years such results can be achieved by its people, who, in addition to maintaining its public services for their own use, are at the same

time able, in addition, to live in a very modest, comfortable condition.

AREA.

The area of Newfoundland is about 43,000 square miles. It is the tenth largest island in the world, and exercises jurisdiction and, in fact, owns a very large portion of the peninsula of Labrador. It is one-sixth larger than Ireland, nearly as large as England and Wales, and about the same size as Denmark, Holland, and Belgium combined. It has something like 2,000 miles of coast but, following the indentations of the bays and inlets, would probably have a coastline of 6,000 miles.

RESOURCES.

The resources of Newfoundland are—

1. Its fisheries.
2. Its mining.
3. Its pulp and paper.
4. Its agricultural products.
5. Its undeveloped water-powers.
6. Its game.

Fisheries. First, as to its fisheries. The principal fishing of Newfoundland is, of course, the cod fishery, although the seal is an important adjunct, as is also the herring fishery, the lobster fishery, and the salmon fishery. Cod fishing has always been the main industry of the country. In the early days it was largely prosecuted from England. It is a most prolific fishery, and is carried on along the shores of the country, out on the great fishing banks in the Atlantic, miles from the Newfoundland coast, and also along the Labrador coast. The prolific character of its fisheries has been recently confirmed by British experts from the British Scottish Fisheries Board and by representatives from the United States of the Fisheries

Bureau Commissioners. There is a wealth of fish all round the coast and, although they have fished for 300 years, there is no apparent diminution, the largest catch ever taken being only a few years ago. The fish, when caught, is salted and dried in the sun for the markets of Spain, Italy, Greece, Portugal, Brazil, and the West Indies. If the cod fishery were developed on modern lines and shipped in chilled chambers and cold storage, the present catch could easily be quadrupled without increasing present cost. In the case of the cod fishery, salt, and labour in drying could be in this way dispensed with. A great market for the fish, for the fresh cod, would be the United States and Canada. At one time, 400 sail of vessels came out from England and prosecuted the fishery. Such a development would provide a good living in Newfoundland for thousands of emigrants, who could earn sufficient in six months to support them and their families for the whole of the year.

The Labrador coast, where thousands of Newfoundlanders go for the summer season to fish for cod, is something like 600 miles long, and there they fish in sight of their own temporary homes. If the fishermen who go up to Labrador had modern methods, motor-boats, and cold storage and chilled stations, and proper transport, they could catch five times the quantity at considerably less than the cost incurred in the present antiquated method.

To-day the Newfoundland fishermen export 1,500,000 cwts. of hard cured salt cod. The cost of catching, the labour in making, and the salting is about 2d. per pound. It could be sold for a profit at 1d. if sold fresh.

The seal fishery was at one time a very important industry in Newfoundland. As many as 400 sailing vessels went out with crews approximating 13,000 sealers, and they have brought in, in one season, as

many as 700,000 seals. The whole operation occupies about two months. It is now prosecuted by steamships, and the industry is not as valuable as in the old days. The herring, lobster, and salmon fisheries are also capable of very great development.

Forests. The most valuable of the Newfoundland forests are in the interior, around the great lakes and at the heads and along the banks of the rivers. Up to 1883, Newfoundland may be said to have had only one industry, namely, the fisheries, and, of course, a little mining. Then the railway was built right through the country, from east to west, and industries have since been springing up. The Newfoundland forests are now made available by the Main Trunk Railway, as well as by branch railways, for lumbering generally. The Anglo-Newfoundland Development Company, of which Lord Northcliffe and his brothers were members, seventeen years ago opened their pulp and paper mills at Grand Falls, which is one of the finest paper mills in the world. The steel and concrete buildings cover 8 acres, are fitted with the most up-to-date machinery, and produce 300 tons of paper and 240 tons of pulp every twenty-four hours. The forests from which the pulp wood is obtained cover 3,000 square miles, and the enterprise represents an investment of over $25,000,000. Recently, the Armstrong Whitworth Company of England have built a large pulp and paper mill at Corner Brook, which cost something in the neighbourhood of £9,000,000. This is also a modern, up-to-date, and very superior mill. Part of the capital for this mill was found by the British Government and the Newfoundland Government in equal amounts. There are many more large and small pulp and paper propositions in Newfoundland and Labrador which, with small, cheap water-powers, will in time be worked, especially when the spruce raw material becomes more scarce. The forests of Newfoundland and

Labrador are about nine-tenths spruce, and reproduce themselves for pulp purposes in about thirty years, so that, with a little care in preventing injury to the small growing tree, the woodsman can go back in thirty years and cut over again the ground where he is cutting to-day: in other words, there is a natural re-afforestation continually going on.

Mining. Newfoundland abounds in minerals; gold, silver, nickel, copper, iron, asbestos, mica, and other minerals of commercial value exist. Of these, copper mines in Notre-Dame Bay and iron mines in Conception Bay are now being worked. The geological formations in Notre-Dame Bay are those invariably associated with copper deposits, and a sufficiency of these has been determined to ensure that the region will eventually become one of the world's greatest copper yielding areas. The copper mine at Tilt Cove was worked for fifty years, had an output of about 60,000 tons a year, and yielded a profit of 22 per cent annually.

Iron mines in Conception Bay are exceedingly rich and extensive, including submarine areas recently developed. The deposits contain some billions of tons of workable ore. And the annual output is now 1,500,000 tons a year. In this respect Newfoundland is second in the Empire, coming next to Great Britain. The one deposit of iron ore at Belle Island represents 15 per cent of the world's known commercial iron ore. The great value of this deposit is its situation, lying as it does midway between the two continents. It is convenient for European markets, having already shipped millions of tons to England and Germany, and may play an important part in the great British steel industry, and it is quite possible the ore may one day be shipped to Pittsburg, in the United States.

The idea that Newfoundland is somewhere near the North Pole, and that ice, snow, and fog abound is most erroneous. In reality, Newfoundland is much

less cold than the neighbouring Dominion of Canada, and in parts of the country the thermometer rarely drops below zero. In the interior and on the western slopes fog is unknown, and a more delightful climate it would be difficult to imagine. The natural growths of the island include wild berries, fruits, and flowers, which ripen only with a great wealth of sunshine, and the abundance of these attests conclusively to the fertility of the soil and the mildness of the climate. Moreover, every fisherman has now his garden and small farm, in which home-grown vegetables are raised for the family table, and throughout the interior are extensive areas suitable for cattle grazing, sheep raising, stock pasturing, and mixed farming generally.

Agriculture. From this it will be surmised that the agricultural possibilities of the island are by no means limited. It must be remembered, also, that for a long period agriculture was strongly discouraged. Moreover, because fishing has been the chief occupation, virtually the whole population is settled around the seaboard, save where, along the railway line through the interior, lumbering villages have been built. The vast areas otherwise have rarely been trodden by human foot.

Eminent Canadian farming scientists have spoken highly of what can be produced by judicious tillage, but the people being fishermen before everything else, farming as a practical industry is only in its infancy. Still, vegetables are grown generally, live stock is raised, poultry is kept, and by degrees the business of husbandry has been extended until now the annual agricultural products are about £2,000,000, or nearly about the value of the fishery products, though with a further effort this could be doubled, and food imports to that amount dispensed with, or the products exported. Sir William MacGregor, Governor of Newfoundland,

1909, testifies to the fertility of the soil and the stimulating effect of the summer climate in these words—

> The growth that suddenly set in about mid-July was comparable only to what one sees in a well-conducted forcing bed. The whole country seemed to be transformed in a few days into an enormous greenhouse. The contrast between the beginning and the end of July was such that I doubted if I had ever seen greater vegetable growth in the same time in the tropics. There can be no doubt whatever that the vegetables grown in this country for human food are of a very superior quality.

Newfoundlanders prefer to catch fish and buy food. The Newfoundlanders are the largest consumers per head in the world of flour; 400,000 barrels being imported every year. This consumption could easily be cut in two, and agricultural products raised at home substituted for it. The same is true of pork, and beef, and butter. Newfoundland grows all her own potatoes, but, like England, in certain seasons imports some new potatoes from foreign countries. This large home market is here and could easily support thousands of families, and offers splendid inducement to intending settler emigrants, as all articles coming in are heavily taxed and in this way gives protection to the home market.

Land is practically free in Newfoundland, and there is no land tax upon it. Large grants can be obtained from the Government practically free and as low as 1s. an acre. The value of the agricultural products last year was something near £2,000,000. Sir James Robertson, who for many years was in charge of the Government Model Farm at Ottawa, Canada, said in 1909—

"Newfoundland has land with a good soil, really fertile, and it should form a most important part in Newfoundland's heritage." He said the crops in Newfoundland to-day could easily be doubled with the same labour in ten years. What Newfoundland wants, of course, is capital, and emigrants for her fisheries,

her agriculture, her mining development, and her water-power developments.

Immigration. There is little or no emigration into Newfoundland in recent years, largely owing to the attractions of her two great neighbours, the United States and Canada, who are spending millions on emigration and settlement. We are suffering from both, as Canada suffered for 100 years while her population remained practically at a standstill—five or six millions—while the United States in the same period mounted up to something like 120,000,000. This was due to the great attractions of the West—the great development in railways and mines, and agriculture and fast transportation. The nineteenth century was the century of the United States, but the twentieth century is Canada's century—and it is not unlikely that the beginning of the twenty-first century will see her with a population of 50,000,000. But Newfoundland will not have to wait till then to really witness the beginning of her development. It is already on the way. It is inconceivable that a large country like Newfoundland, with great, prolific fisheries waiting only for the capital to develop along modern lines, should have to wait much longer. Here you have a country, one-third waters, rivers and lakes, containing the undeveloped water-powers so valuable for cheap manufacture. Recent years have shown the wonderful development of manufacture and cheap transportation in countries where rivers and lakes have been harnessed. It is no longer any argument against development to say you have not the raw material for your manufacture—the wool, the cotton, the minerals, the timber; if you have the water-power, and particularly if it is on the coast with good shipping facilities, then you can bring your raw material to your power. A good illustration of this is shown in the great iron mine at Wabana, Belle Isle, Newfoundland, where 1,000,000 tons of iron

ore are brought annually from Newfoundland to Sydney, Nova Scotia, Canada, when there is cheap, abundant coal, there to be manufactured into steel rails, iron girders, and other products.

Look at what is happening on the Shannon to-day, where a contract has been made with German engineers to install a £10,000,000 electrical plant. What are they going to do with the power? If they give it away free to every company that will start an industry, it will be a new birth for Ireland. There is going to waste in Newfoundland to-day water-powers that might be converted into electricity. With modern and recent discoveries in electrical machinery and management, there is no doubt that quite small water-powers could be harnessed at small cost all over the country.

Game. Another, and the last resource to which I shall refer, is our game. The attractions of Newfoundland for the sportsman and the tourist are very great, and the island is regarded as one of the world's great game preserves, and also as possessing natural beauties of a high order. This has been testified to in recent years by the late Admiral Kennedy, the late F. C. Selous, the great artist Millais, Dr. Grenfell of Labrador, Hesketh Pritchard, Dr. Davies, the late Earl Grey, Sir Brian Leighton, Lord Northcliffe, Lord Rothermere, Mr. Cecil Harmsworth, Sir Myson Beeton, Sir Thomas Esmond, and several members of the Royal Family.

The big game of the island consists cheifly of caribou, but bears, wolves, and lynx and other animals are to be killed. The variety of the feathered game is extensive, and the lakes and rivers teem with salmon and trout. Millais, in his now famous book *Newfoundland and Its Untrodden Ways*, says—

> The Newfoundland caribou far surpasses the European reindeer, and is equal in size to the caribou of Eastern Canada. For its size Newfoundland contains more caribou than any other part of the world. I know of two recently killed heads of over fifty points each.

The late F. C. Selous says—

I think I never enjoyed an outing more than my last trip to Newfoundland. Of the five stags I shot, two carried very fine heads and the three others very fair ones.

The late Hesketh Pritchard says—

I do not think I ever, in any part of the world, enjoyed myself better than on my hunting trip to Newfoundland. I was fortunate enough to strike the caribou in great numbers.

Admiral Kennedy says—

In my opinion, Newfoundland is the finest sporting country it has ever been my lot to enjoy. I have fished in every river, crossed the island from east to west, and hunted in every part of it, and not alone is there deer stalking, but grouse shooting, and also salmon and sea trout fishing. But the sport *par excellence* is hunting the caribou or woodland reindeer. The animal is a finer beast than the Norwegian reindeer, and carries more massive antlers.

TRADE WITH ENGLAND.

The trade with England is decreasing. That is due entirely to British merchants and British methods. In 1888 Britain supplied Newfoundland with 44 per cent of her imports. To-day it has fallen to 20 per cent. In 1888 England was first on the list, to-day she is third. In recent years the Government of Newfoundland have given very special attention to the public roads for motors, to the railway service, and to the steam-boats connecting with the railway, and recently the Furniss Withy Company have put on two very superior, large boats, built within the last two years, named the *Newfoundland* and the *Nova Scotia*, which run from Liverpool to Newfoundland and give a very excellent service. They are the last word in comfort and equipment.

(*Lecturer:* THE RIGHT HON. LORD MORRIS P.C., K.C., K.C.M.G.)

THE ECONOMIC POSITION OF SOUTH AFRICA

Historical Review.

From the earliest days of its modern history, South Africa's geographical situation in relation to the rest of the world has been a dominating factor in its development. It is uncertain whether the Phoenicians circumnavigated the African Continent, but it is historical fact that the Portuguese navigators, Bartholomew Diaz and Vasco da Gama, rounded the Cape at the end of the fifteenth century and so discovered the great ocean route to the East, which remained the highway between Europe and the Orient for nearly 400 years, until the opening of the Suez Canal in 1869.

When we consider the unenviable conditions under which these intrepid mariners sailed, as compared with the luxurious shipping services on the South African route to-day, and realize that the journey now occupies approximately sixteen days, whereas the voyage of those pioneers took many months, we cannot fail to appreciate the benefits which maritime progress has bestowed upon us.

Throughout the sixteenth century the Cape remained uninhabited by Europeans, but it was an occasional port of call for the Portuguese, who then held the ocean trade route to India. During the seventeenth century the Dutch and British entered the arena of competition and used Table Bay for revictualling their ships going to and from the East, and thus Table Mountain became a recognized beacon on the highway of the seas.

The Dutch remained in possession of the Cape until

the early nineteenth century when it was finally ceded to Great Britain. From that time onwards, through a series of circumstances and events which I have not time to trace in detail, the opening up of the sub-continent commenced through the enterprise of those independent and Calvanistic pioneers, "the Voortrekkers." In 1820, 5,000 British settlers were established in the Eastern Province of the Cape, and British traders settled at the Port of Durban in 1824.

The subjugation of the hinterlands of South Africa at the hands of the Dutch and British pioneers throughout the nineteenth century, and the story of their perseverance in the face of overwhelming odds against the primitive, provide material for epics in themselves.

The wanderings of the Voortrekkers continued until they had crossed the Orange River into the fertile plains of the Orange Free State. Many of them moved on beyond the Vaal River and settled on the High Veld of the Transvaal, others scaled the Drakensberg Range and, finally, descended into the garden country of Natal.

In this manner the pioneers opened up the territories which to-day comprise the Union of South Africa, viz., the Cape Province, the Orange Free State, Transvaal, and Natal, which were unified in 1910. In the light of the remarkable developments which have ensued since that date, the strife and vicissitudes accompanying the establishment of the white races in South Africa need not be recalled. Viewed in perspective to-day, they must be regarded as part of the great process of winning the sub-continent from barbarism.

The discovery of diamonds and gold, and later of coal, with the resultant influx of settlers and capital, is all part of the wonderful romance of settlement, and has exerted far-reaching influences upon the trade and development of the country.

With unification in 1910, South Africa became an

economic entity, with a single purpose designed to promote the progress and well-being of the country as a whole. Before Union, each of the colonial governments had to promote its own peculiar interests, and, as may be imagined, curiously baffling problems and anomalies arose. Unification has eliminated undue consideration of local interests, as opposed to national interests. The amalgamation of all State organizations, both executive and administrative, has made for efficient and well-controlled services, and opened the way to a common road of development in trade, commerce, industry, and transportation.

After little more than sixteen years' experience of unified control, the more lasting benefits are manifesting themselves. From the year 1910, therefore, the real economic development of South Africa commenced, and in any consideration of the subject the importance of Union cannot be too strongly emphasized. With this necessarily brief historical review as a basis, I shall now proceed to deal with the existing economic position of South Africa.

Area and Population.

The area of the Union is 472,347 square miles. According to the latest official census the European population numbers 1,672,108, and the native and coloured population, 6,857,000. In other words, a white population equal to only one quarter of the population of larger London is occupying and building up a territory more than five times the size of Great Britain. The density of the European population is 3·5 persons per square mile. Including the native and coloured population, the density of population is sixteen persons per square mile. The United Kingdom is thirty times more densely populated than the Union.

Johannesburg, the largest town in South Africa, has

a population of 288,000, of which roughly 152,000, or approximately 50 per cent, are Europeans. In size, therefore, its population corresponds with that of Bradford. Cape Town has a population of 207,000, and Durban 146,000. No other towns have a population exceeding 100,000.

FINANCE.

I shall now deal with the salient features of the Union's finances.

Public Debt. At the 31st March, 1926, the public debt was £221,933,000. £144,156,000 in *stock* and *debentures* is domiciled in London. £65,223,000 in stock and debentures, and £12,554,000 in temporary loans are domiciled in South Africa.

The assets held against this debt amount to £209,283,000 of which capital invested in the State railways and harbours represented £148,859,000. In addition, there is an accumulated sinking fund for the redemption of the debt, which at 31st March, 1926, amounted to £17,000,000, represented by Union Government securities at nominal value.

General Sinking Fund. A general sinking fund for the redemption of debt has been established, and from 1st April, 1927, a minimum sum of £650,000 will be contributed to the fund annually for forty years. An important feature of the sinking fund scheme is that interest on stocks redeemed by the operation of the fund will continue to be paid to the sinking fund until the expiry of the period of forty years.

Revenue and Expenditure. Within the past twelve years the revenue, excluding railway receipts, has risen from £14,000,000 sterling to £27,000,000. Expenditure has increased within the same period from £13,500,000 to nearly £27,000,000.

Taxation. Out of the total estimated revenue for next year, taxation is expected to contribute the sum

of £19,317,000, the principal items being, Customs and excise, £9,502,000; income tax, £6,635,000; mining, £900,000; and native taxes, £900,000. As a matter of comparison it is worth mentioning that the rate for the normal income-tax in South Africa is slightly over 1s. 1d. in the pound, and that married taxpayers are allowed an abatement of £400, with further abatement in respect of each minor child.

TRADE.

Export and Import. The returns of trade are always a valuable index to the economic position of a country, and I wish to emphasize that the balance of trade has been in favour of South Africa for many years. For the year 1925, the total value of South African trade amounted to £157,065,535, of which exports were valued at £89,266,219, and imports at £67,799,316. Since 1910, our export trade has increased in value by £37,001,151, and our import trade by £28,958,622. Of the total value of products exported in 1925, gold accounted for £34,329,376, wool £15,095,446. The other principal items were: diamonds, £8,605,525; coal, £3,314,583; hides and skins, £2,821,636; wattle bark and extract, £1,109,161; and angora hair, £836,326. Base minerals, maize and fruit, are also considerable items of export.

The South African business has hitherto been characterized by growing exports of raw products, a proportion of which has been reimported in the form of manufactured goods at enhanced prices. With increasing industrial developments, the time is approaching, however, when many of these products will be exported in a manufactured state. We are now approaching the stage of being self-dependent.

The imports into South Africa from the United Kingdom have grown by 50 per cent in value between 1910 and 1925, whilst those from foreign countries

have doubled. The most striking advances are from the United States of America, India, and Canada, while Germany is recovering her pre-war position. An outstanding item in our import trade is in motor vehicles, the value of which increased from £300,000 in 1910 to over £4,000,000 in 1925. On the other hand, a significant feature is that the value of foodstuffs imported as compared with the exports is now substantially less, whereas in 1910 the reverse was the position.

Our exports of foodstuffs have increased enormously since 1910, when they were valued at £1,325,620, as against £10,105,091 in 1925. But apart from foodstuffs, our exports have shown noteworthy increases, principally in wool, coal, wattle bark and extract, maize, cotton, etc. The principal decreases have been in ostrich feathers and mohair.

As regards the destinations of our products, the proportion consigned to foreign countries has advanced from 17 per cent in 1910 to 37 per cent in 1925, indicating that South Africa is gaining a more important place in the world's markets. France purchased £3,800,000 worth of our products in 1925, compared with £169,000 in 1910. Last year, one of the outstanding features of our export trade was the volume of maize dispatched overseas. The total shipments amounted to 929,820 tons, valued at £5,669,405, which contributed materially to the value of foodstuffs exported.

Of recent years manufacturing industries have made marked progress, and various overseas manufacturers have established themselves in the country, encouraged by the abundance and quality of the raw products obtainable, and South Africa's advantageous geographical situation in relation to the markets of the world. One of the latest industries to be introduced, and one likely to prove of great utility in a country of

long distances, is that for the assembly of motor vehicles.

The most serious obstacles which have to be overcome to speed-up industrial development are mainly—

1. Competition with overseas manufacturers.
2. Small population and capital.
3. High costs of marketing.

Notwithstanding these obstacles, production on a considerable scale of such manufactured articles as foodstuffs, boots and shoes, and other leather goods, furniture, cement, matches, soap, candles, confectionery, tobacco and cigarettes, chemical goods, explosives, flour and meal, has shown that home industries can be successfully operated. A few years ago, South Africa relied upon importation for most of these requirements.

To-day, there is little competitive importation against these articles, due to the improving quality of local manufactures, and the bulk of the imports is confined to textiles, wearing apparel, yarns and fibres, and metals, metal manufactures, machinery and vehicles.

Agricultural and Industrial Development.

From the existing trade position, I must pass to agricultural and industrial expansion.

Since 1910, South Africa has undergone steady exploitation in these respects, and there can be little doubt that agriculture is destined to become the basic industry. In support of this aim, the Union Government has built up highly organized departments, with the specific object of fostering all forms of production from the land. There are probably few other countries in which the farming community receive such active support and assistance.

This sympathetic policy, coupled with the growth of the co-operative idea of marketing among farmers, is having beneficial effects upon production, as reflected in the growing exports in agricultural products.

The South African farmer would be the first to admit that agriculture, as an organized industry, is still largely in the developing stage, but in the meantime it is possible to point to a remarkable record of progress, and the fact that South African products, such as wool, maize, sugar, fruit, tobacco, dairy products, skins and hides, wattle bark, cotton, etc., are competing successfully in the world markets to-day, is a sure indication of the promise of the agricultural industry.

Irrigation. The Government's policy of fostering agriculture is backed up by an equally active policy in the matter of irrigation, admittedly one of the pressing requirements in South Africa. Within recent years a sum of £7,000,000 has been expended in the construction of co-operative irrigation schemes, designed to bring very large areas under cultivation.

Any reference to the growth of the agricultural industry would, of course, be incomplete without making reference to the stimulating influence which the mining industries, as large consumers of local products, have always given to agricultural production in South Africa.

Industrial Development. The conditions created by the war brought home the need to produce for ourselves, the chief incentives being the enhanced cost of overseas supplies and the uncertainty of obtaining them. During that period, South Africa was thrown upon her own resources, and had to meet most of her requirements. Industries came into being for the manufacture of a variety of commodities and articles for which formerly we had depended upon overseas sources.

South African manufacturers now realize the unique position they hold in certain markets compared with competitors in less favoured countries who have to rely upon importation of raw material, and there is, in my judgment, every justification for a feeling of

confidence in the continued industrial advancement of the country.

Between the years ended March 1916 and 1924, the number of factories increased from 3,998 to 7,112, the number of employees from 101,178 to 182,877, and the salaries and wages bill from £8,913,000 to £20,505,000. The gross value of industrial output, which of course does not include that of agriculture, advanced from £40,435,000 to £79,789,000; the value of South African materials used from £10,025,000 to £18,234,000; the value of land and buildings from £11,775,000 to £20,966,000, and of machinery and plant from £15,777,000 to £30,432,000; while the fixed capital invested which in 1915–1916 amounted to £27,553,000, stood at £51,398,000 in 1923–1924. The value of the output of the metal and engineering trades advanced from £7,567,000 in 1916 to £14,449,000 in 1924; articles of food and drink from £15,814,000 to £26,085,000; chemicals, £4,290,000 to £5,587,000; clothing and textiles from £1,301,000 to £2,915,000; and leather and leatherware from £1,240,000 to £2,877,000.

Concurrently with the growth of industries, it was realized that cheap electric power would be a vital factor in promoting progress.

Production and Supply of Electric Power. In 1922 legislation was passed appointing a Government Electricity Control Board to issue licences for and control electricity undertakings, and for the establishment of an Electricity Supply Commission as a corporate body to undertake the production and supply of electricity and co-ordinate existing supplies.

The Electricity Supply Commission was appointed in April, 1923, and embarked immediately upon an extensive construction programme. It has under construction four electricity supply schemes, and is taking over from the railway administration the power stations, transmission lines, and sub-stations

constructed in connection with the electrification of a section of the Natal main line.

The aggregate capacity of the generating plant of the five-power undertakings is 188,000 kilowatts with an estimated initial output of 670,000,000 units per annum, and consumers have been secured to the extent of the demand that can be supplied from the plant now being installed.

The Commission is linking up with several existing undertakings, one being the Victoria Falls and Transvaal Power Company, Limited, which caters principally for the gold mines on the Witwatersrand, and has an output of over 1,000 million units per annum. As an example of the magnitude of these electrical undertakings, it may be remarked that one of the gold mines consumes more electricity than is supplied by the Sheffield Corporation's electricity plant.

MINERALS.

Deposits. The unrivalled deposits of gold, diamonds, and coal are too widely known to call for much comment. Coal distillation plants have been established to exploit the coal reserves. The resources of iron ores have been made prominent by the erection of iron and steel works in the Transvaal and Natal, though I must emphasize the fact that the full significance of the immense reserves of high and medium grade iron ores in South Africa is not generally realized. The deposits in the Transvaal alone are estimated at thousands of millions of tons and, with all the necessary raw materials available in the country, there can be little doubt that this key industry will expand on a much greater scale. The incalculable benefits of such a vital industry need no elaboration. Discoveries in recent years of large deposits of platinum in the Transvaal have been made, and this metal is already being produced on a commercial basis. Tin, copper, lead, fluor-spar, manganese,

silver, osmiridium, asbestos, corundum, mica, common salt, soda and talc are among the minerals which are being produced. The mineral assets of South Africa are stupendous, and there is still an abundant opportunity for the prospector.

Annual Value of Mineral Output. The aggregate value of minerals produced in 1925 was £54,630,492, of which gold accounted for £40,767,981.

Wages Paid by Gold Mining Industry. In 1925 the gold mines alone paid out £14,000,000 in wages, while a sum of approximately £1,500,000 per annum is expended in the purchase of local products, chiefly in the form of foodstuffs for the native employees. In addition to the purchasing power of the mine workers, a considerable share of about £13,000,000 expended by the mines annually on stores, circulates among local producers and merchants.

Gold Output. In 1914, 8,396,068 ounces of fine gold were produced. In 1925 the output was 9,597,592 ounces, an increase of 1,201,524 ounces, and in value of £5,103,751. In 1910, 33 per cent of the world's production of gold came from the Union, whereas the percentage had risen to 51 in 1925.

Recently, further gold discoveries have been made in the Transvaal.

Diamond Output. Diamonds in 1914 were recovered in the Union to the extent of 2,801,017 metric carats, the estimated value being £5,487,194. The 1925 output shows a slight decrease as compared with the 1914 production, the total number of carats recovered being 2,430,126 which was estimated to be worth £8,198,128. South-west Africa, the figures for which are *not* included, is also a very important diamond producer.

Coal Output and Sales. In 1914 the tonnage of coal produced amounted to 8,477,923 tons, the price realized being £2,258,896. In 1925 the total tonnage

was 13,007,141, the value being £3,880,440. Thus from 1914 to 1925 the demand for Union coal increased by 4,630,218 tons and the revenue of the collieries by £1,621,544.

The Transvaal and Natal mines are the largest producers, and then come the Orange Free State, and lastly the Cape.

Price of Coal at Pit's Mouth. The pit's mouth price per ton is lowest in the Transvaal, being 5s. 0·67d. as against 5s. 6·88d. in the Orange Free State ; 7s. 5·13d. in Natal, and 14s. 4·98d. in the Cape. These figures provide an interesting comparison with the price of coal in Great Britain to-day.

Copper and Tin. The production of copper and tin during 1925 amounted to 9,962 and 1,939 tons respectively, representing in value £514,219 and £304,552.

Mining Dividends. For the year 1925 the dividends declared by the various mining undertakings in the Union amounted to £11,658,048. Of this substantial sum the mines in the Transvaal contributed no less than £9,069,981, which represents more than 77 per cent of the return made to shareholders.

Railways.

In the earlier stages I referred to the important influence which the discovery of diamonds and gold exerted in opening up the interior. These great discoveries gave the real impulse to the need for railway facilities, and in the same way that the mining industries have fostered agricultural production, so they have been the means of urging forward transportation.

The growth of the railways has been remarkable. From 240 miles in operation in 1876, the system in the Union of South Africa has grown to close upon 13,000 miles of open lines.

Statistics. In dealing with the transportation system

of South Africa, certain conditions peculiar to the country must be emphasized, viz.—

(*a*) The small population in relation to area.

(*b*) The great distances between the chief industrial centres and the coast and between the principal centres of population and the producing and consuming centres.

(*c*) The absence of navigable rivers or canals.

(*d*) The vast tracts of undeveloped territory which railways must traverse to reach their objectives.

(*e*) The heavy grades and curves encountered. (To reach Johannesburg from Cape Town there is a total grade lift representing 18,600 ft., and between Durban and Johannesburg, 15,530 ft.)

It should be noted here that with the exception of 480 miles of privately owned lines, the railways are State owned, and that both transportation and harbour services are controlled by the one Government department. The extent of this undertaking may briefly be stated in the following statistical form—

Capital expenditure	£140,041,324
Number of staff employed . . .	92,229

During the year ended 31st March, 1926.

1. The railways earned .	£24,151,407 8s. 9d.
2. The working expenses amounted to	£18,735,324 14s. 6d.
3. The tonnage of Goods Traffic, including minerals and coal, totalled . . .	25,233,094 tons
4. The number of passengers carried was	76,282,587
5. The live stock carried numbered .	3,034,529
6. The train miles run were . . .	44,329,230
7. The tonnage of cargo dealt with at the harbours was . . .	8,239,776 tons

To indicate the intensive development of the railway

business, I may mention that since the year prior to union—

1. The passenger traffic has increased by 170·59 per cent
2. Goods traffic by 204·26 ,,
3. Coal traffic by 86·61 ,,
4. Live stock traffic by 19·51 ,,
5. Earnings by 130·99 ,,
6. Working expenditure by . . . 230·10 ,,
7. Open mileage by 74·82 ,,

and

8. Train mileage by 125·45 ,,

Rates Policy. The question of industrial development of a country is bound up with the transportation charges operating in its territory, and this paper would be incomplete without some allusion to the rates policy.

The South Africa Act provides that in the conduct of the railway administration due regard shall be had to agricultural and industrial development within the Union, and the promotion, by means of cheap transport, of the settlement of an agricultural and industrial population in the inland portions of all provinces of the Union. Thus the guiding principle applied in determining the tariffs is not to charge more than the traffic will bear. A great volume of traffic has been created as a consequence of the adoption of low tariffs for primary products.

Prior to, and for some years after, the consummation of union, imported goods which could bear high rates formed a much larger proportion of the total traffic carried than they do to-day. The position now is that the low-rated traffic of South African origin has grown to such an extent that by far the greater portion of railway traffic is carried at low rates. Indeed, of the total goods and mineral traffic now conveyed by rail,

over 90 per cent is of South African origin. It is safe to say that the co-operation of the Administration in the matter of favourable tariffs has been an important factor in the increased growth of primary products.

It is estimated that the total surrender of revenue as the result of reductions effected in passenger fares and goods and mineral rates since January, 1921, amounts to £5,010,876.

Railway Finance. Under the provisions of the South Africa Act, it is provided that, so far as may be, the total earnings of the railways, ports, and harbours shall not be more than are sufficient to meet the necessary outlays for working, maintenance, betterment, and the payment of interest due on capital.

Railway revenue has discharged all the liabilities of the railways for the last sixteen years, including full interest on all loss sustained during the lean years after the European War, and, in addition, has provided £4,500,000 for betterment purposes. Railway revenue has also contributed, since union, £10,000,000 to the general revenue of the country and £1,000,000 towards the liquidation and deficiencies in the superannuation and pension funds of the staff. Altogether, these contributions total £15,500,000.

Electrification. One of the largest undertakings during recent years in connection with railway operation has been the electrification of the section of the Natal main line between Glencoe and Pietermaritzburg, a route mileage of 175. This work, I might mention incidentally, constitutes the largest main line electrification in the British Empire, and I think I am not unduly optimistic in saying that it will prove of inestimable value in overcoming the physical difficulties of that section of the railway in Natal where the grades are particularly steep and the curvature is severe.

The electrification of the busiest suburban line at Cape Town has now been undertaken.

GRAIN ELEVATORS.

Of probably equal importance to the work of electrification, is the system of grain elevators established during the last few years, as the benefit conferred by their existence is reflected upon the economic conditions of the country as a whole. During the grain season of 1925, South Africa had a record maize crop, and but for the facilities provided by the elevators there would not only have been the utmost difficulty in handling the crop, but it could never have been moved so expeditiously.

ROAD MOTOR SERVICES.

In addition to the railways, the administration operates nearly 3,000 miles of road transport, and it is evident from the progress of these services that the mileage of motor transport will in a few years equal that of railways. Road transport profitably serves districts in which railways, however cheaply constructed, could not pay.

One outstanding effect which is very observable as the direct result of the expansion of road motor transport, is the increasing activity by farmers in dairying, a branch of their pursuits hitherto neglected because of the lack of adequate means of conveyance, which these services provide, as rapid feeders to the railways.

ROADS.

The road system in South Africa to-day comprises between 70,000 and 80,000 miles of highways, and a sum of over £1,500,000 sterling is spent annually on their construction and maintenance. With these developments, the increase in motor traffic has been remarkable; there were over 90,000 motor vehicles in the Union last year, equivalent to about one to every eighteen of the European population.

HARBOURS AND SHIPPING.

I now come to the important facilities of harbours and shipping.

The merging of the various pre-Union railway units into one comprehensive system afforded the opportunity of incorporating the control of the ports and harbours under the same management. The wisdom of this step has since been demonstrated. One direct consequence is that harbour dues and charges in South Africa to-day are much less than those in force at most other large ports of the world. Other direct benefits are that harbour revenue and expenditure have been placed upon a financially sound basis, and large programmes of harbour extensions have been adopted.

Under the unified system of control the needs of each harbour in respect of new works, increased accommodation, additional plant and working facilities, are carefully studied in relation to the traffic conditions of the country as a whole. Harbour development schemes are thus economically and with advantage carried out in their relative order of importance.

The harbour operations are necessarily an integral part of railway traffic operations generally, as a link in the chain of transportation by which the import and export trade of the country is handled.

The capital expenditure on harbours, which at union totalled about £9,500,000, to-day stands at £13,500,000, and in addition to this the new works in breakwaters, quays, cranes, harbour craft, etc., approved by Parliament for future construction, total no less than £9,500,000, an amount, it will be observed, equivalent to the total harbour capital expenditure at the time of union. Heavy expenditure has been and is being incurred in the provision of cargo sheds and cold storage, coaling facilities and grain elevator accommodation. Considering the trend of future trade,

particularly in grain, fruit, and coal, it has undoubtedly been of the greatest advantage to have had one controlling authority responsible for the establishment of a comprehensive scheme of special appliances and equipment for both railway and harbour purposes to deal with these large items in the country's trade.

In addition to controlling the movement and handling of ships and their cargoes, the present system includes jurisdiction over all other auxiliary and adjunctive services, such as the construction, operation, and upkeep of lighthouses, registration and licensing of craft, stevedores, and other persons engaged in the handling of goods, etc., utilization of life-saving appliances and carrying out of marine salvage operations along the South African coast; pilotage of vessels in and out of South African harbours; management and operation of ships and other craft employed in Government services, etc.

The anticipated enactment of a South African Merchant Shipping Act, will, of course, bring under much required control many facilities and maritime services closely related to other harbour matters.

Tourist Traffic.

In conclusion, I would like to say that we welcome oversea visitors to South Africa. Arrangements are being made to inaugurate more convenient facilities for tourists, and it has been decided to establish special reception bureaux.

Last year was a record one for tourist traffic from overseas, and this year will witness an even heavier traffic. The country is being opened up specially for tourists in order that people from overseas may have the fullest opportunity of observing and studying the remarkable wealth of natural resources, attractions, and interests of one of the greatest of the British Dominions.

CLIMATE.

As a country to live in, the Union climate is most delightful and invigorating. The tropical diseases prevalent in Central and other parts of Africa are seldom met with, and South Africa may be accepted as one of the healthiest places to visit. Though the summer days are somewhat warmer than those of Europe, the heat generally experienced during the summer months—excepting in low veld areas—is by no means oppressive on account of the great degree of dryness of the air, while the winters may be characterized as mild and genial. The percentage of possible sunshine is about 73 as against 29 in London, which justifies our calling it a Land of Sunshine.

CONCLUSION.

I have endeavoured to present to you a simple picture of South Africa as I visualize it, without any elaborate colouring or exaggeration.

It is the country of my adoption, and I have lived and worked there for nearly forty years.

It contains a young and virile people who have overcome many vicissitudes on the road to nation-building. It possesses attractive and abiding features, and my faith in its destiny has increased with the passing of the years. It is a great country—a country of great resources and great possibilities.

(*Lecturer:* SIR WILLIAM W. HOY, K.C.B., M.INST.T., F.R.G.S.)

THE ECONOMIC POSITION OF AUSTRALIA

ONE must be admitted to be venturesome to essay the task of describing the people and resources of a continent within so short a time as is at our disposal. I am already conscious of the countless facts and matters of importance to which I shall not have time to refer, but I trust that you will overlook such shortcomings.

HISTORY.

The first white colony was established in Australia—on the shores of Sydney Cove—138 years ago. The population of the Commonwealth now approximates 6,000,000, and the figure is surely remarkable when it is borne in mind that the island continent is distant from 12,000 to 14,000 miles from Great Britain, which is the source that has supplied this great Dominion with 97 per cent of its citizens. Speaking as an Australian who knows his Commonwealth rather well, one may be pardoned for asserting that Australia is—at least potentially—from many points of view the most valuable of Britain's possessions. Brief reference may be made to some of the factors which go to substantiate that assertion, and perhaps the most important of these is what may be termed the personal-national factor. Throughout the length and breadth of a territory which is twenty-eight times the area of the United Kingdom—larger, in fact, than the United States of America—the people have a common ancestry; they all speak the same language and are imbued with similar domestic and national ideals; dogma apart, Christian morality actuates all that is best in them. Their laws and institutions are founded on British

precedent. Their pride of race and inherent loyalty are strengthened by practical considerations, in that they have everything to gain and nothing to lose by their country's remaining an integral part of the Imperial realm.

The Commonwealth has ramparts of oceans on all sides. When it is adequately peopled, its strategic position will be unique. It is beyond argument that the insularity of Britain has been one of the chief reasons for her greatness. A narrow strip of water—across which men and even women can swim—has, for nearly 1,000 years, until the last decade, proved an impassable barrier to the invaders (so long as the people were united). But with the conquest of the air, Britain is no longer inviolate. Her insularity may even be a menace if her people allow themselves to be lulled into a false sense of security. But it is no mere channel which divides Australia from any possibly hostile country; vast stretches of water render almost fantastic any thought of air invasion that would be effective of itself. The defence of an island continent adequately populated with people all possessing the same national ideals would be a comparatively simple matter.

Australia is the only continent which has established and preserved (thus far) the ideal of a purely white population. There is no aboriginal native problem to be wrestled with. Nature seems to have ordained that the aborigine shall pass. Every proper effort is being made to preserve them, but, with the advance of civilization, these primitive people, who are constitutionally unable to resist the mildest of white men's maladies, do not survive. In Tasmania, the last aborigine died about fifty years ago. In Victoria and New South Wales the survivors number less than 2,000. In the remote areas of other States, blackfellows, as they are termed, still range through the

lonely bush, but it seems inevitable that with the extension of white settlement the aboriginal race will become extinct.

The Australian climate seems especially adapted to the building up and maintenance of a virile white race. While the climate obviously varies with latitude, it has few extremes. White men, women, and children thrive in all quarters of the Continent. I have lived for years in the tropics of North Queensland and have engaged regularly in manual labour throughout the heat of many summers. I have played tennis with English girls under a tropical sun which drove the mercury to register 100° F. in the shade, and none of us was any the worse, yet I have felt completely enervated during more than one heat wave in London. Unlike similar latitudes in other countries, the humidity in the Australian tropics is low (excepting in a few localities), and such diseases as malaria are almost unknown. The death rate, even in the humid districts where sugar-cane flourishes, and where all labour is done by white men, is lower than in the temperate cities of the south ; and all over Australia the mortality rate is below that in any other country in the world, with the exception of New Zealand.

Natural Resources.

In wealth of natural resources the Commonwealth is at least as happily placed as is any other continent, and that is a conservative claim. Every type of mineral required in modern industrial progress is found in vast deposits. Coal (black and brown), iron, copper, zinc, lead, tin, slate, and oil-bearing shale, are available in what seem to be illimitable quantities, as are marble (of the most exquisite hues), granites (of many colours), and other ornamental and constructional stones. It was the lure of the goldfields which, during the latter half of last century, made the island continent the

Mecca of the red-blooded adventurers who were the progenitors of the major portion of the Australian people to-day. The richest silver mine in the world was at Broken Hill in New South Wales.

Magnificent forests extend over 24,000,000 of acres. The hardwoods are of a type needed in constructional works that demand massive timbers which combine durability with strength.

As producers of wool, a very small percentage of the people of this southern dominion dominates the markets of the world; and yet the pastoral wealth of Australia has been merely tapped so far. There is so much land available that very many pastoralists have been content to leave the provision of sustenance for their flocks and herds solely to Nature. But Nature demands intelligent co-operation from men if she is to yield a full measure of her bounty. Good seasons may generally be relied upon within 200 miles from the sea coast, but inside the belt Nature is fickle and she needs to be studied. With the provident conservation of water and fodder, the stock-carrying capacity of the Commonwealth can be increased immeasurably. Under more than 1,000,000 square miles of territory over which the rainfall is uncertain and often meagre, there are seemingly inexhaustible supplies of artesian water. The yield does not appear to diminish during the most severe and prolonged droughts. But this water must be bored for to depths varying from a few hundred to 3,000 or even 4,000 ft. When it is tapped it gushes to the surface in an interminable and regular stream. The periodic recurrence of droughts in the "back" country does not appal the careful stockbreeder nowadays. If Nature occasionally throws difficulties in his path she as surely provides the means to overcome them, and the fact remains that the producers of wool are the most prosperous people in a land where prosperity is indeed general.

Irrigation by water dammed from the great rivers is now being given serious attention. I might talk for an hour to tell you of the splendid engineering feats which are bringing 2,000,000 acres under irrigation. The productivity of the land is enhanced twenty-fold thereby. Irrigated country is able directly to support with all the amenities and comforts of modern civilization over 200 people to the square mile, and, if urban superstructure be added to that, the density of even the productive island of Britain (395) is completely overshadowed. The products of the irrigation settlements are chiefly fruits in all forms, wines and dairy produce.

Beef Production.

There is practically no limit to what can, and ultimately must, be done in beef production for export. Progress in this direction has been retarded owing to the absence of stabilized and assured markets. But such disabilities are economic, though they are none the less real. They are not insuperable, but time restrictions forbid their discussion here. Dairy farming is a most profitable industry, which prospers from Southern Tasmania to the tropics of North Queensland. Refrigeration and science have eliminated temperature as a governing factor in the production of high grade dairy produce. The equable climate permits of cows being out in the fields at all seasons of the year, and the animals find all their sustenance in the open pastures.

Cereals.

Every type of cereal may be grown to considerable profit in all the States. There are about 200,000,000 acres of proved wheat-growing land, although only about 12,000,000 acres have been cropped in any one

year, as yet. Nevertheless, the yield last season exceeded 164,000,000 bushels, and more than 75 per cent of this represented exportable surplus. That surplus was enough to provide ample breadstuffs for 20,000,000 people for a year! New types of the wheat plant are constantly being evolved, by inter-pollination, to suit the wide varieties of soils. Labour-saving devices in agricultural implements render it practicable for one man to cultivate, sow, and harvest about 300 acres, single-handed, in a season. I recently read in the *Sydney Bulletin* that a farmer named Quinn, in New South Wales, has (single-handed) with a modern harvesting implement and a team of horses gathered 300 bags of wheat between daylight and dark in one day this season. Such results are calculated to amaze agriculturists in Great Britain, or, indeed, in any other country. They are the fruit of a combination of brains, boundless energy, and a climate that permits of work in the open fields practically every day in the year.

Fruits, Sugar and Cotton.

There is no sort of fruit that does not attain to perfection in the open air under Australian skies. The most delicate strawberries, pip and stone fruits, grapes, figs, mangoes, pawpaws—all are to be seen in the markets of the cities. Sugar-cane—cultivated, be it reiterated, only by white men—brings fortune to the industrious, thrifty, and enterprising; more men are engaged in manual work in the canefields of tropical Queensland than in any other rural industry in that State; and only the fringe of the sugar-growing country has, as yet, been exploited. The production of cotton, which was embarked upon only in 1920, bids fair, ultimately, to make the Commonwealth self-supporting in regard to, if not an exporter of, this textile.

PRIMARY WEALTH.

The total value of primary wealth produced in 1925 (the last year for which figures are available) in the Commonwealth exceeded £280,000,000. Thus the value of primary production *per capita* of the population stood at about £48. Many conservative-minded people seem to be of opinion that Australians should remain a nation of primary producers. But such an order of affairs would be entirely anachronistic, and it is frankly to be admitted that it is the desire of the people to make their Commonwealth economically self-contained. Ethically, it is an unassailable policy to spend on locally manufactured goods the money derived from the local sale of primary produce. But as surely as the Australians need to find markets overseas for their surplus primary produce, so surely must they take manufactured or luxury goods in exchange. It is the wish of the people, as tangibly expressed in their preferential tariff policy, that all such overseas trade should be with the Motherland. Interminable arguments range about the question of tariffs. But the bald fact remains that this mere sprinkling of people at the Antipodes is, in the aggregate, Britain's best customer (excluding the people of India with fifty times the population of Australia). Each year over £60,000,000 (or about £10 per head of the population) is spent by Australia in the manufacturing districts of Great Britain. If one assumes the members of Australian families to average five in number, each family spends about £1 per week in the United Kingdom. Nevertheless, Australian factories contrived last year to turn out, chiefly for local requirements, goods to the value of over £137,000,000.

THE AUSTRALIAN WORKER.

We read much in the British Press of industrial unrest in the Commonwealth. It is, perhaps, natural

that we should hear only of strikes. There would be little interest in a cabled item of news that industrial peace reigned throughout ninety-nine industries; interest centres in the one wherein industrial war wages. Last year the average value of each factory employee's work amounted to £334. That figure represents the added value consequent upon the employee's work. A statement of that fact is, perhaps, the best way of replying to possible criticism that the Australian worker is bent on smashing the prevailing industrial order. Throughout the Commonwealth the vast majority of men wage-earners either own, or are in process of acquiring, their own freehold homes. The seeds of Bolshevism can find no permanent root in such a country. The people enjoy a very high standard of living; wealth is more evenly distributed than anywhere else in the world excepting in New Zealand. The number of indigent poor is almost as negligible as is the number of idle rich. Bank deposits in cash last year averaged £228 per family (again assuming five to a family). The money in savings banks (representing the cash reserves of the workers) was £31, and in ordinary banks £42, per head of the population in each instance. All this has been achieved by Anglo-Celtic brains, energy, and enterprise, lubricated by British capital. The proportion of foreign investments in the Commonwealth is negligible.

Importance of Trade.

I cannot permit this opportunity to pass without referring briefly to the importance to us all of Anglo-Australian trade: during the last two years Australia has bought about £130,000,000 worth of British goods —practically all manufactured goods. Britain, over the same period, purchased from Australia goods to the value of £132,000,000. Thus, for every 20s. spent on Australian goods during the past two years 19s. 9d.

came back to lubricate the wheels of industry and progress in the Mother Country. Now let me give a contrast. During these same two years Britain bought from the United States goods to the value of £489,000,000, whereas the people of the United States of America found it necessary to buy from Britain goods to the value of only £160,000,000, and the visible adverse trade balance was £329,000,000 in addition to over £60,000,000 war debt payment. Your trade with Australia balanced, or practically did so; for every 20s. you sent to the United States less than 7s. came back to help solve your unemployment problem. And your trade with most other countries is hardly more advantageous. Take Anglo-Danish trade for the same period. You sent to Denmark no less a sum than £98,000,000, chiefly to purchase dairy produce. Denmark found it necessary to spend only £27,000,000 in this country over the same period. For every 20s. sent to Denmark, the magnificent sum of 5s. 6d. came back to keep your factories busy.

Please do not consider that Australia's purchasing power is being properly exploited; most emphatically it is not. The British manufacturers are losing chances every day of their lives. Although Australia is the United Kingdom's best customer for wholly British manufactured goods (excepting only India), nevertheless she spent £168,000,000 in foreign countries during the last two years. Let me give you one example: last year Australia purchased 53 per cent of the motor chassis exported from Britain; 6,000,000 people took more from you than did the rest of the world. Yet Australia bought five times as many motor chassis that year from foreign countries! That means that she could have taken two and a half times as much as the total British export last year. One is almost constrained to ask, "What is the matter with British industry and enterprise?" Australia's and the other

Dominions' requirements should be carefully studied if their markets are to be captured and held. In the Australian field, British motor manufacturers have a 12½ per cent economic advantage, plus the strongest sentimental preference, yet enterprise seems to be woefully lacking. I was looking through one of Australia's best known journals recently and saw five full pages of advertisements for foreign cars. There was not one line advertising cars of British make. Surely this is deplorable.

Buying Imperially.

And now one word about buying imperially in Britain. Australia at the present time has large quantities of dried fruits—especially raisins, currants, and sultanas—and millions of boxes of Australian butter either in England or on the way. On the question of quality, these commodities, to say the least of it, are able to compete with the world, and on the question of price they must needs be sold in open competition in the British market.

Surely it is sound business and practical patriotism to buy from your own kith and kin overseas; to support the people who support you. Remember that for every 20s. spent on Californian raisins, which are American, only 7s. comes back to keep your factories busy; for every 20s. spent on Danish butter only 5s. 6d. comes back to help solve your unemployment problem. Contrast this with your trade with Australia, when practically the whole of 20s. comes back to lubricate the wheels of industry and progress in the Motherland.

Keep the caption "Be British, Buy British" ever in mind, and if you cannot get what you want from within the United Kingdom, get it from within the Empire, which is able to supply every requirement of modern civilization and industrial progress. Remember always

that the average Australian family spends about £1 per week in Great Britain. You are asked, as far as possible, to return the compliment.

IMMIGRATION.

The important connection between emigration and marketing cannot too often be stressed. The Dominions' capacity to absorb new settlers is in direct proportion to their ability to find stabilized markets for the resultant increased output of produce. If Britain would provide those markets, the people of the Dominions would take correspondingly increased volumes of manufactured goods in exchange—this applies particularly to the southern Dominions. Let me reiterate that if the housewives of the United Kingdom made it an invariable rule to ask for British or Empire products, the retailers, if unable (at first) always to meet such requirements, would pass the demands back through the ramifications of trade until they reached the producers in all parts of the Empire.

It will be a happy day when the following sequence of facts is implanted in the minds of the people in the British Isles. Assured markets for Dominions produce in Britain would mean effective migration from Britain to the Empire overseas; effective migration would do much to provide the solution of the unemployment and housing difficulties. A proper redistribution of the white peoples of the Empire would greatly simplify the Imperial Defence scheme; an increase in population in the Dominions would mean a greater demand for British manufactured goods, which also would help to militate against unemployment. Thus it is that the combating of our greatest social evils, and the solving of a considerable Imperial problem are dependent, to an extraordinary degree, upon the everyday dealings of the individual housekeeper.

Australia needs millions more British men and

women with a capacity and a will to work. Government migration schemes, with their systems of assisted passages, make relatively little headway.

Mr. H. P. Colebatch, Agent-General for Western Australia, summed up the position to a nicety in last Sunday's *Observer*. He wrote—

Before the war there were more people going from Great Britain to settle in Australia than there are to-day, and at that time there were no elaborate schemes of State-aided immigration. To-day Australia is paying vast sums of money for recruiting immigrants, and contributing, with the Imperial Government, towards their steamship fares. Its Governments are also guaranteeing them employment on their arrival. And yet the number going is less than it was before the war.

It is idle to talk about the standard demanded by Australia. That standard applies only to assisted migrants. Why are not at least as many unassisted migrants (upon whom there are no restrictions) going as were going before the war? Australia is a more attractive place to-day than it was then; England is more overcrowded.

The unassisted migrants who came out before the war included all ranks of society—those with money and those without; those with education and those without. Such a balanced migration absorbed itself. Every migrant with money, and the capacity to direct its employment, made opportunities for many without. To-day Australia is looked upon as a good place to send the unemployed to—and the number of these that can be absorbed is limited. Finance sets up the most important limitation.

How is it that the foreign European is prepared to pay his own passage and take his chance in Australia, whilst the Britisher will only go if his passage money is paid and a guarantee of employment given?

Think of the difference in the two cases. In going to Australia, the Britisher does not lose his flag, or his language, or his national ideals. He is assured automatically of full citizenship.

In Western Australia, the Government Agricultural Bank will advance money only to Britishers employing British labour. The foreigner—whether he be landowner or employee—is discriminated against. And yet we have representative foreigners endeavouring to arrange with our Government to settle their people on our lands, they providing the money.

If Australia is good enough—and it is good enough—to attract people and capital from foreign countries, why do not Britishers and British capital go there—independent of Government schemes and Government assistance?

I write as an Englishman born, who has spent forty-five years in Australia. Fifty years ago a man who thought England was getting too crowded to afford full opportunity for himself or his family did not say: "Why doesn't Brown go? Why doesn't Jones?" He simply got his belongings together and went himself, facing a three months' voyage of very real hardship as compared with the month's pleasure trip of to-day.

It must surely be obvious to the thoughtful that Australia (and New Zealand) is the ideal future home for the surplus people of the British Isles. It is, perhaps, no extravagant dream to visualize the Commonwealth as being, at some future day, the centre of power of the British Empire. By its very geographical isolation, the island continent can be made into a veritably impregnable fortress. No such area of land in the history of the world has ever been held by a group of people united by blood ties, and by domestic and national ideals, and among whom there has never been any real discord. In these respects, as in many others, the Continent of Australia and its people are unique. In the meantime, there is no safer or more remunerative field for the investment of British capital and British man-power. It behoves the people of the United Kingdom to appreciate actualities and actively to co-operate with the Australians in the development of the priceless heritage of which they are the co-heirs, with a view, ultimately, to make the All-British Continent the centre of Imperial strength, and the Empire itself a still more beneficently powerful factor in the world's affairs.

(*Lecturer:* L. ST. CLARE GRONDONA.)

THE ECONOMIC POSITION OF NEW SOUTH WALES

In attempting an economic review of New South Wales, it is very desirable to appreciate the fact that only 138 years have elapsed since Captain Phillip founded the first white settlement on the shores of Port Jackson. The development which has taken place within this short period should form a very useful criterion to assist one in gauging the possibilities ahead. For the greater part of this period, that is before the general introduction of steam and electricity, the means of communication with Europe were such that rapid development, as we now visualize it, was impossible, and the population, which even to-day is not large, was, during the early pioneering stages, very meagre. To-day the population is over 2,300,000, of which more than 98 per cent is of British extraction.

The prevailing conditions which have enabled this handful of people to register such amazing progress as has been made need to be understood and will be briefly referred to before I proceed to examine the economic position in detail.

Climate.

New South Wales is situated entirely within the Temperate Zone, and has a climate both mild and temperate and free from extremes of heat and cold. Abundant sunshine is experienced in all its seasons, and this factor alone has exercised a strong influence on the lives and character of its people. In Sydney, the capital of the State, an average of only twenty-three days per year are without sunshine, and the average

range of temperature between the hottest and coldest months is only about 17° F. Observations with the wet bulb thermometer show that the temperature in any part of the State is not maintained at so high a level as to be detrimental to the health and physique of persons engaged in outdoor labour. Further, it is almost wholly subject to the bracing influence of frosts during five or more months of the year.

New South Wales, the total area of which is 309,432 square miles (about two and a half times the size of the United Kingdom), is divided into three well-defined divisions, each of which has a well-defined influence on its production, and the whole of its eastern shore, with its several fine harbours, is bounded by the Pacific Ocean, across which its varied exports find their way to the markets of the world.

Compared with the rest of Australia, of which it forms a one-tenth part of the total area, and embraces a large proportion of the most fertile and best watered land of the Continent, it has within its borders 39 per cent of the total population and 41 per cent of the total wealth. It is responsible for 39 per cent of the production of Australia, and more than 40 per cent of the overseas trade of the Commonwealth passes through its ports; its lands depasture about 44 per cent of the total sheep; it contains the principal coal and silver lead deposits, the latter of which rank in importance among the largest in the world, and it is the centre of the Australian iron and steel industry.

The Broad Basis of Prosperity.

New South Wales—the Mother State of Australia—therefore takes a leading part in nearly every important activity, and is assured in that position by the broad basis on which its prosperity is founded, viz., the pastoral, agricultural, dairying, mining, and manufacturing industries. The products for export are

representative of these various and diverse activities, and consist principally of wool, wheat, butter, coal, frozen meats, and silver lead ores, in addition to those important by-products of the pastoral industry, viz., skins, hides, tallow, etc. Manufactures are now extensive and are continually expanding. Already a very considerable proportion of the foodstuffs, clothing, and iron and steel work required for domestic consumption is being supplied locally. The total output of the factories of New South Wales during the year 1924–25 was valued at £158,000,000.

The diversity of these industries ensures continuity in the volume of production and trade, so that in the past quarter of a century unbroken prosperity has been experienced. During this period an extensive overseas trade in wheat, butter, and frozen meat has been developed, and the export of wool has been continued on a large scale, notwithstanding occasional depression due to dry seasons.

The prospects for our primary produce in the world's markets suggest, too, that there is ahead a period of still greater prosperity, with all the development that it implies, and it is here appropriate to remark that special legislative and administrative assistance to market these products along co-operative lines is stimulating the primary producer to even greater efforts.

Potentialities.

It is estimated that at least three-fifths of the area of New South Wales has immense potentialities, only the fringe of which has been touched ; the outstanding facts are the size of the territory, the variety of its products, and the scope there is for further expansion. Ninety-eight per cent of its land is fit for profitable occupation, and nowhere during any season is its climate injurious to the health of European outdoor workers.

Although practically the whole of the area suitable for occupation has been taken up, the State is now facing the problem of re-settlement in order to make room for more settlers and provision for the more productive use of the land. Two very large irrigation schemes on the Murrumbidgee and Murray Rivers are in course of construction and development, and, provided the essential overseas markets can be found, these will accommodate ultimately about 10,000 new settlers.

A system of bulk handling of wheat has been established at a cost of £3,500,000, and is reported to be working satisfactorily and effectively. During the last completed season 18,000,000 bushels of wheat, or more than one-third of the wheat dispatched by rail, was handled in bulk through these elevators. The potentialities of the State as a wheat producer are shown by the fact that the present area sown with wheat could be increased five-fold without exhausting the whole of the suitable wheat lands. Notwithstanding this, the average wheat production of the past five years was 40,000,000 bushels, so that the potential capacity of the State in the production of wheat approaches 200,000,000 bushels if all the wheat land were cultivated for that cereal.

The irrigation areas on the Murrumbidgee River already support 2,000 farmers, which number will be increased ultimately to over 5,000. Work is in progress for irrigation systems on the Murray River, and ultimately this river, with its principal tributaries, will be canalized and made serviceable for both irrigation and navigation. The immense volumes of water stored at the dams will be harnessed for hydro-electricity power for industrial and domestic purposes, thereby providing some of the amenities of modern urban life for rural dwellers, and increasing the attractiveness of country life. Two such hydro-electric

schemes have already been brought into operation at Burrenjuck and Nymboida.

Recent Progress.

The outstanding factor in the progress of New South Wales during the past twenty years has been the development of new industries and the steady growth of local financial resources. This affords evidence of the rapid accumulation of material possessions which has been rendered possible by the wonderful prosperity and the continued stability of the financial and commercial systems. Thus, out of a total public debt of £248,000,000, including a proportion (£141,000,000) of the Commonwealth war debt (allocated on a population basis), contracted between 1901 and 1921, two-thirds was held within the State, whereas of the loans existing in 1901 only one-fifth had been subscribed locally. This may be further illustrated by the statement that of the capital expenditure by the State on public works and closer settlement between 1901 and 1925, no less than £77,000,000 was obtained locally, either from revenue or by loan, as compared with £81,000,000 raised on loan in London. Thus, over the period of twenty-five years, 49 per cent of the capital expenditure on the railways and other public works of New South Wales has been derived from its own resources. Again, increasing proportions of the capital of public companies operating within New South Wales have been subscribed within the State. These facts surely indicate that the State's prosperity is not founded only, as is so often suggested, on borrowings obtained abroad.

National Wealth and Income.

The true extent of local resources was shown in a comparative statement made in connection with a recent estimate of the national wealth by the Government

statistician. In 1921 the amount of private wealth per head of population in New South Wales was £450, and the gross national wealth £597. The ratio of external public debt (including the State's proportion of war debt) to national wealth was only 11·2 per cent.

In point of average amount of income per head of population, New South Wales compares very favourably with the leading countries of the world, and the well-being of her industries suggests that the rapid growth which has taken place should be maintained. At present less than 5 per cent of the total income derived in New South Wales is paid to absentees, even including the amount paid to investors in Government bonds.

The following table shows the relative wealth and income of some of the principal countries in comparison with New South Wales at the latest date at which comparisons are available (1914). It is probable that any subsequent change would have been in the direction of improving our relative position. The data for this table were taken from a paper read before the Royal Statistical Society in 1919 by Sir Josiah Stamp. The estimates for New South Wales were compiled by the Government Statistician of New South Wales on the same basis as was adopted for the other estimates.

Country	Amount of National Wealth per Head of Population	Country	Average Amount of Income per Head of Population
	£		£
United States . .	424	United States .	72
New South Wales .	392 [1]	New South Wales	57 [2]
Argentine . .	340	United Kingdom .	50
United Kingdom .	318	Canada . .	40
France . . .	303	France . .	38
Canada . . .	300	Germany . .	30
Germany. . .	244		

[1] Net, after deducting external public debt and capital owned by absentees.
[2] Income of residents only.

The average annual amounts of wages actually paid to permanent male employees (including juveniles) in the principal industries of New South Wales in 1923-24 were as follows—

Manufacturing	£226
Mining	261
Rural	178 (including value of board and lodging).

The average amount of income of all resident persons receiving income in New South Wales in the year 1920–21 was £220, or equivalent to £95 per head of the population. Since that date there has been a substantial increase, the exact extent of which cannot yet be stated.

DISTRIBUTION OF WEALTH AND INCOME.

While about one-half of the private wealth of the State is comprised in a comparatively small number of large estates, the distribution of wealth is far wider in New South Wales than in either Great Britain or the United States of America. Indeed, the diffusion of wealth has proceeded so rapidly that 70 per cent of the adult males are now possessed of estates at death, a proportion twice as great as it was forty years ago. Nearly one-half of these estates exceed £1,000 in value.

This wide distribution of wealth was also shown in the results of the war census of 1915, and it is becoming more and more evident in the returns of the savings banks and in the growth of industrial insurance business. In 1925 the number of operative depositors' accounts in the savings banks was equivalent to nearly one-half of the number of individuals in the population. The total amount of deposits exceed £69,000,000, equivalent to an average of £30 per head of population, or £50 per account. It is significant that although the average amount of deposits per account has not increased appreciably, the number of depositors' accounts has more than doubled in the last ten years.

As a further evidence of the general well-being of the

population, there is the fact that though our total income is relatively high, only one-seventh of it is received by persons whose incomes exceed £700 per annum. This is indicative of the purely Australian characteristic of high average standard which presents a marked contrast with the extremes of wealth and poverty which characterize older countries, even America, which is relatively more wealthy than New South Wales.

ACCUMULATION.

By carrying the examination to other spheres, fresh evidence of thrift and prosperity is produced. The amount of life assurance policies in force in 1923 was nearly £81,000,000, an average of nearly £37 per inhabitant. The accumulated funds of friendly societies, from which it is estimated nearly one-third of the population draws benefit, amounted in 1924 to nearly £3,000,000. The annual subscriptions paid to life assurance societies, building societies, and friendly societies approach £5,000,000, while the net addition to savings bank accounts (including interest) averages nearly £4,000,000 per annum (during year 1925–26 the amount was £5,300,000), and a considerable proportion of the savings bank withdrawals are made for the purpose of investing in Government loans.

The amounts accumulated by the citizens of New South Wales in four principal ways at various dates since 1901 are shown in the following table—

	1901	1911	1921	1924
	£	£	£	£
Commonwealth War and Peace Loans—New South Wales Subscriptions	—	—	106,374,000	112,355,000
State Loans (Amount on New South Wales Register)	12,043,000	29,968,000	55,919,000	64,501,000
Fixed Deposits in Trading Banks	20,417,000	30,089,000	47,779,000	58,165,000
Deposits in Savings Banks	11,809,000	25,361,000	57,394,000	66,162,000
	£44,269,000	£85,418,000	£267,466,000	£301,183,000

During the same period the deposits at current account in the trading banks have grown from £12,842,000 in 1901 to £27,051,000 in 1911, to £46,856,000 in 1921, and to £66,000,000 in 1925. That this accumulation has not taken place at the expense of industrial investment will be shown in tables of public and private capital expenditure later.

The records of the banks' exchange settlement indicate an enormous increase in the business activity: the value of cheques cleared through the exchange amounted to £167,700,000 in 1901; £304,500,000 in 1911; £709,000,000 in 1921; and £909,114,483 in 1925. The increase in the past four years represents a growth of 28 per cent in transactions represented by inter-bank cheques.

The prosperity of the community is evident, also, in the efforts of the population to secure their own homes, and a rapid increase is taking place in the number of people who own or are purchasing the houses which they occupy. Thus, in the period of ten years elapsing between the census of 1911 and 1921, the number of persons purchasing their homes by instalments increased from 11,322 to 46,953, and the total proportion of the tenants to occupiers decreased from 50 per cent to 46 per cent.

Schemes for the instalment purchase of houses operate through the building societies, the Government Savings Bank, and through private institutions. As a result a very large proportion—probably much more than one-half of the houses now being erected—are being purchased by their prospective occupiers, and people of even slender means are acquiring their own homes in this way.

Beside the national gain through increased contentment of the population and the added stability of the social system produced by people acquiring a real stake in the country; the system introduces the regular

investment in the building industry of a very considerable amount of small periodical savings which otherwise might not be saved at all, through lack of opportunity sufficiently attractive to encourage the degree of self-denial required. The amount paid into building societies during the year 1923–24, added to the amount of principal repaid on Government Savings Bank advances, equalled £1,300,000, and the combined annual amount of advances made was £1,850,000. This latter figure represents nearly one-seventh of the total amount expended annually on all building operations, although it is exclusive of the amount paid off under private instalment purchase schemes. In this way increasingly large amounts of capital are recruited for investment and larger individual sums are left available for other development work.

The proportion of home ownership, however, though high, is surpassed by the extent of ownership of rural holdings. Out of 60,000,000 acres of freehold land in the State 95 per cent is owned by its occupiers, so that tenancy is of very small extent. The remaining lands are held almost exclusively on direct tenancy from the Crown.

Value of the Real Property.

Between 1901 and the date of the last valuation of wealth (1921) there was a rapid growth in the value of real property as a result of the expansion of settlement and the growth of prosperity. The table on page 77 shows the value of privately-owned real estate at decennial intervals.

The value per head of the population shows that the aggregate values are growing much faster than the general population.

Under the stimulus of prosperous conditions the value of real estate, as represented by property valued

PRIVATELY-OWNED PROPERTY

Year	*Estimated Value*			*Value per Head of Population*		
	Land (Unimproved Value)	Improvements	Land and Improvements	Land (Unimproved Value)	Improvements	Land and Improvements
	£	£	£	£	£	£
1901	112,895	151,798	264,693	83	111	194
1911	169,232	213,057	382,289	102	128	230
1921	263,363	392,073	655,436	125	186	311
1924	291,932	439,913[1]	731,845[1]	131	197	328

[1] Exclusive of improvements in shires.

for local government ratings, shows a continued increase since 1921. This applies to both unimproved values and to the value of improvements effected, and more particularly to the metropolitan area. Between the 1921 and 1924 valuations the unimproved value of land in the metropolis increased by £24,300,000, or 28 per cent, while the value of improvements increased by £68,000,000, or 44 per cent. Although much of the increment in values was due to the increasing demand for properties, and to the values added to new areas by the progress made with the city railway, a large part of it is due to the completion of the many large new buildings which have been erected in the past few years in order to cope with rapidly expanding commercial needs. In the period covered, i.e. 1921–24, the cost of new buildings completed in the city and suburbs was £31,700,000, which represents a very substantial proportion of the increased total value of improvements.

Over the same period of three years, i.e. 1921–24, there was an increase of £11,000,000 in the value of alienated rural holdings, made up by an increase of £2,000,000 in the value of land and £9,000,000 in the value of improvements.

DEVELOPMENT EXPENDITURE.

A further test of progress is found in the provision of transport facilities, which are of especially vital importance in all lands of great distances, like New South Wales. The approximate amounts of capital expenditure under Government administration during the twenty years ended 1921, and in the four succeeding years, has been as follows—

	1901–21 (20 *years*)	1922–25 (4 *years*)
	£	£
Railways and Tramways . .	54,200,000	17,800,000
Roads and Bridges . . .	14,100,000	2,700,000 (Estimated)
Harbour Works	12,100,000	1,800,000
	£80,400,000	£22,300,000

In the same periods expenditure on other large developmental works and utilities has been as follows—

	£	£
Water Supply, Irrigation, Bores and Sewerage.	21,900,000	11,600,000
Wheat Elevators (bulk handling) .	2,000,000	1,600,000
Municipal Gas and Electricity Works	4,600,000	3,400,000
	£28,500,000	£16,600,000

The magnitude of these sums should not be considered absolutely, but in relation to the population, which did not reach 2,000,000 until towards the end of 1919, and in relation to the wealth of the country, the extent and growth of which is indicated in the following statement of the capital value of property utilized in connection with the principal industries in the years 1901, 1921, and 1924.

	1901	1921	1924
Rural Industries	£	£	£
Land, Houses, Improvements, Live Stock, Machinery and Implements . .	162,000,000	348,000,000	384,000,000
Manufacturing Industry			
Land, Buildings, Machinery and Plant	14,000,000	59,500,000	78,800,000
Mining Industry.			
Land, Buildings, Machinery . .	7,000,000	11,500,000	12,800,000
Railways and Tramways	43,500,000	99,000,000	111,700,000
	£226,500,000	£518,000,000	£587,300,000

The outstanding feature of this comparison is the rapidity of the growth of capital invested in the manufacturing industry. It was thought that with the return to normal conditions after the war the secondary industries would meet severe competition and cease to progress. Contrary to this expectation being realized, there was a growth of one-third in the capital equipment of the factories of the State in the three years 1921 to 1924. This growth was maintained in 1925, and an intensive campaign in favour of Australian-made goods has been initiated by the manufacturers.

This expansion, and that which is occurring in production and in overseas trade, are the best evidence which the State can offer of the essential soundness of a policy of sane and well laid out developmental expenditure. It is to be recalled that the State has definitely committed itself to the responsibility of providing and controlling a number of large public utilities and undertakings, such as railways, tramways, grain elevators, irrigation areas, abattoirs, etc., which, in most other lands, are conducted by private enterprise. The natural growth of these, along with the

privately-owned undertakings, renders imperative and inevitable a large outlay of loan money, which is secured by the ample assets which it creates and whose value is enhanced by the progress and prosperity of the State.

An unofficial inquiry recently made into the merits of the policy of constructing public utilities from loans raised by the Government concluded that, although in recent years the loan expenditure had proceeded at a rather faster rate than had the growth of private property, the two factors had maintained approximately the same average rate of growth over the past quarter of a century. The position was rendered the more satisfactory by reason of the fact that there had been a large increase in the proportion of loan moneys raised within the State, so that, despite the rise in rates of interest, the annual amount of interest paid to outside investors had grown at a rather slower rate than had either income or value of production.

How the Interest Bill is Paid.

Approximately 80 per cent of the borrowed money is invested in works which are revenue-producing and pay their own interest bill.

The total interest bill on the State debt for 1924–25 was £10,600,000, and the net amount of interest and revenue earned by works constructed from loans was approximately £8,600,000. In addition to this, the State had a revenue of £1,000,000 from Crown lands, which are largely benefiting from the loan expenditure (after deducting the amount set aside for construction and maintenance of public works). Consequently only £1,000,000 of the annual interest bill remained as a charge on the ordinary revenue of the State. This amount is payable in respect of interest on expenditure incurred in connection with developmental works not yet arrived at a productive stage.

ABSENTEE OWNERSHIP.

The exact proportion of the property contained in the State which is owned by absentees has never been estimated accurately, but, from the results of the war census of 1915, it was ascertained that less than 10 per cent of the private property in the State was owned abroad, and that the proportion so owned was acquired principally through investment in public companies.

It is, however, an eloquent fact that the value of rural lands in New South Wales held by residents of other countries is less than 2 per cent of the total value, and that only a similar proportion of the gross income of individual taxpayers accrues to absentees.

Although considerable emphasis is sometimes laid upon the extent of public borrowing abroad, approximately one-third of the public debt of the State is upon the Sydney registers, and this proportion is steadily increasing, having more than doubled since 1901.

PRODUCTION AND OVERSEA TRADE.

The effect which the tremendous expansion of investment, both public and private, has had upon the growth of production and trade is evident in the table on page 82, showing the value of production in each of the principal industries and the value of oversea trade at intervals from 1901 to 1925.

The values of production in the primary industries, as shown in the table, have been influenced to a considerable degree by seasonal factors. Thus, those quoted for 1921 show the results of a prolific agricultural and dairying year and a bad pastoral season, while in 1924 the pastoral and agricultural seasons were fairly good but the dairying season was poor.

VALUE OF PRODUCTION[1]

Industry	1901	1911	1921	1924	1925[2]
	£	£	£	£	£
Pastoral	12,447	19,434	20,057	36,963	45,256
Agricultural	7,060	9,749	32,373	20,556	28,616
Dairying, etc.	3,188	6,534	16,447	12,237	14,173
Total, Rural	22,695	35,717	68,877	69,856	88,045
Forestry, Fisheries, and Trapping	986	2,213	4,089	4,204	5,026
Mining	5,681	7,392	10,192	11,845	12,000
Total Primary	29,362	45,322	83,158	85,905	105,071
Manufacturing (Value added to Raw Materials)	9,742	19,432	43,128	55,661	57,700
Grand Total—Principal Industries	£39,104	£64,754	£126,286	£141,566	£162,771

VALUE OF OVERSEA TRADE[3]

	£	£	£	£	£
Imports	17,560	27,343	43,321	58,225	66,321
Exports (including Ship's Stores)	18,211	33,077	50,088	45,108	62,399
Total	£35,771	£60,420	£93,409	£103,333	£128,720

[1] At place of production. [2] Preliminary estimate. [3] At Sydney.

The influence of the steep rise in values is to be allowed for between 1911 and 1921, while the increase in wool values is to be allowed for between 1921 and 1925.

The value of exports shown above represents the f.o.b. value, Sydney, and not the amount accruing to local owners of goods sold abroad. In other words, they exclude profits made by local holders who consign produce for sale oversea, and do not, therefore, form a reliable factor in estimating the balance of trade.

Apart from values, the following comparison shows the physical bases of the economical activity of the country.

		1901	1911	1921	1924	1925
SHIPPING (Oversea and Interstate)—						
Vessels cleared	No	2,853	3,146	3,023	3,320	3,155
Net tonnage		4,274,000	6,834,000	7,122,000	8,986,000	9,015,000
RAILWAYS (State)						
Miles open for traffic		2,846	3,761	5,043	5,523	5,656
Goods carried	Tons	6,398,000	10,355,000	15,563,000	15,693,000	16,208,500
Passenger Journeys	No	29,261,000	60,920,000	120,735,000	128,101,000	128,532,000
MANUFACTORIES—						
Establishments	No	3,367	5,039	5,837	7,321	7,901
Employees	No.	66,200	108,600	145,000	159,700	165,500
AGRICULTURE—						
Wheat—area under	Acres	1,862,000	2,613,200	3,663,300	3,929,700	3,641,000
Grain—production	Bush.	16,174,000	27,914,000	55,625,000	60,832,000	33,741,000
IRRIGATION SETTLEMENTS—						
Cultivated area	Acs.	—	1,720	59,900	92,200	[1]
Holdings—Cultivated	No	—	86	1,190	1,562	[1]
PASTORAL INDUSTRY—						
Horses	No	486,700	689,000	663,000	658,400	[1]
Cattle	No.	2,047,400	3,194,200	3,375,300	2,938,500	[1]
Sheep	No	41,857,000	44,947,000	33,852,000	37,539,000	[1]
MINING—						
Mines working	No.	—	—	493	482	[1]
Employees	No	36,610	37,010	26,060	28,780	[1]
Coal produced	Tons	5,968,400	8,691,600	10,793,000	11,618,000	[1]
Silver produced	Oz.	8,228,200	14,529,100	4,241,900	9,255,000	[1]
Zinc produced	Tons	14,900	190,400	20,700	158,000	[1]
Pig-iron produced	Tons	—	24,660	90,050	74,075	[1]

[1] Not available.

Although the progress thus summarized has been very great, the resources of the State are, as yet, in many directions, developed in small part. They await the application of larger amounts of capital and the labour of a larger population to show still greater expansion. This is apparent from consideration of the large tracts of wheat lands at present used for sheep, from the possibilities of irrigation and the generation of hydro-electricity, from the large resources of coal which have only recently commenced to be applied

to the smelting of the large deposits of iron ore which are available for exploitation, from the scope existing for expansion in the dairying industry, and from greater activity in growing fruit, potatoes, maize, oats, and other crops to supply local and oversea markets.

GROWTH OF THE METROPOLIS.

Perhaps the best indication of the rapid commercial and industrial expansion of the State is given by the growth of its capital city, whose population reached 1,000,000 in 1924, having doubled itself in the short space of twenty-two years. Sydney, which is still growing at a rapid rate, now ranks second among the white cities of the Empire, having recently displaced Glasgow from pride of place next to London.

The populations of the two cities have varied in the following way during the past three years—

	Glasgow	*Sydney*
1923 . . .	1,041,400	981,400
1924 . . .	1,051,000	1,012,000
1925 . . .	1,057,100	1,039,400
1926 . . .	1,034,500	

The figures quoted for Sydney exclude Lidcombe, Granville, Auburn, and Bankstown, with a total population of about 60,000, which might fairly be included. There are also elements of metropolitan population in places more distant from the city, but these also are excluded.

To meet the pressing needs of the present and future population, work has been commenced upon a system of underground electric railways, estimated originally to cost more than £4,500,000, and upon a bridge to span the harbour at an estimated cost of £5,500,000 (including approaches). The bridge, which will be the largest arch bridge in the world, having a span of

1,650 ft., is to be finished by 1930, when it is proposed to have the city railway and suburban electric lines in working order.

The harbour on which Sydney stands is one of the most commodious and beautiful in the world, and it ranks fifth among the ports of the Empire in respect of volume of trade. The depth of water at the entrance is 40 ft., and this depth is maintained right up to the principal wharves. Already a capital expenditure of over £11,000,000 has been incurred in catering for the needs of the large volume of shipping which it receives.

The environs of the city are famous for beautiful scenery. There are numerous spacious sandy beaches thronged by thousands of surfers, while within easy access are the Hawkesbury River, which Anthony Trollope compared for scenic beauty with the Rhine. The Blue Mountain districts, containing the famous Jenolan Caves, are also within easy reach.

Social Progress.

While very great material progress has been made, the social and economic well-being of the population has received attention. Indeed, social progress has been so pronounced in recent years that conditions of life in New South Wales may be compared favourably with those in any country of the world.

The small extent of slums, the low death rate, the marked improvement in respect of the rate of infantile mortality, and the high average standard of life, substantiate a claim that material progress has not been achieved by any exploitation of any class in the community. "Sweating" of employees does not exist. Hours of labour are restricted within moderate limits, having recently been reduced to a standard of forty-four per week, conditions of work are subject to judicial regulation, and humane standards are guarded with the authority of the State. Fair and reasonable

wages are generally determined by industrial tribunals endowed with legal authority. A general living wage of £4 4s. per week, providing sustenance, at a reasonable standard, for a man, wife, and two children, is payable as a minimum to all unskilled workers of the lowest grade (other than rural) and this wage is revised from time to time in accordance with changes in the cost of the necessaries of life. Wages of skilled workers are fixed by judicial tribunals at reasonable margins above the minimum unskilled rates, and are adjusted periodically in consideration of variations in the purchasing power of money. The rise in the rates of nominal wages has not lagged behind the rise in the cost of living. In fact, the purchasing power of the average wage payable to male adult workers in the past four years has been greater than at any other time during the present century, being approximately 10 per cent above the standard of 1911. Enlightened factory laws protect the health of workers and minimize the risk of accident, and a far-reaching system of workmen's compensation, which was further extended in 1925, provides relief when industrial accidents occur. Moreover, provision is made by the Government for the sustenance of aged persons and of permanent invalids, for maintenance of public hospitals, for succour to sick persons, and for the relief of distress among the deserving poor. A comprehensive scheme of pension on a liberal scale for widows with dependent children is now being inaugurated. This provides the widow with £1 per week for herself and 10s. additional for each dependent child under 14 years of age. In addition, she may have a personal income not exceeding £1 10s. per week in addition to rent. In the year 1923–24 no less than £4,682,000, or over £2 per head of population, was expended by the Government on charitable objects. Cases of destitution are rare and there are no workhouses. The State provides educational

facilities free for all classes of the community and, when necessary, gives financial assistance to enable intelligent and willing students to progress from primary schools to secondary schools and the university. The attendance of children at school is compulsory between the ages of 7 and 14 years. The numbers voluntarily undergoing courses of secondary education have increased three-fold in the last ten years, while the number of university students has almost doubled. University education is provided free of cost to almost half the students attending lectures.

By such means a prosperous community—of which 98 per cent is of British extraction—is growing and developing independent characteristics under social conditions which it is claimed are more beneficial than those of the Old World. This claim may be tested by studying the facts relating to wealth, thrift, housing, anthropometry, rates of infantile and occupational mortality, consumption of alcohol, and similar significant factors. Most of these have been dealt with above, and it is noteworthy that the rates of mortality in nearly every occupation are lower in New South Wales than in England, the rate of infantile mortality is much below that of nearly every other country of the world; the average duration of life is greater than in any country of the Old World, being six years greater than in England. Children born of Australian parents are generally of much better physique than those of immigrant parents. The consumption of alcoholic beverages in New South Wales is generally much less than in European countries.

Wages and Employment.

The table on page 88 shows the average weekly rates of wages paid in the industries of the State at various dates during the past twenty years.

	s.	d.		s.	d.
1901	43	11	1921	95	10
1911	51	5	1922	91	6
1913	55	9	1923	94	6
1916	61	11	1924	93	6
1919	76	9	1925	95	–
1920	94	–			

The total amount of wages paid in the several industries for which particulars were available in 1920–21, the year of highest average rates, and 1923–24 is as follows—

Wages Paid in	1920–21	1923–24
	£	£
Rural Industries (Agricultural, Pastoral, Dairying, etc.)	8,000,000 (partly estimated)	8,650,000
Manufacturing Industries	25,620,000	29,670,000
Mining Industry	6,430,000	6,530,000
Railways and Tramways	11,430,000	11,920,000
	£51,480,000	£56,770,000

These figures, of course, represent only the principal industries, and they are by no means complete. Still they serve to show that the total volume of employment therein during the past three years has increased by more than 10 per cent. The following figures demonstrate this.

The number of persons employed in these industries in each year was as follows—

Persons Employed in	1920–21	1923–24
Rural Industries	136,300	135,500
Manufacturing Industries	145,000	159,400
Mining Industry	26,100	28,800
Railways and Tramways	46,600	49,500
	354,000	373,200

There exists evidence to show that considerable economy is being effected in rural labour by the introduction of machinery and by the adoption of scientific methods of cultivation and by other means.

UNEMPLOYMENT.

The following table indicates the course of unemployment in the State during the past three years, the estimated number of unemployed being shown as at the end of each period of increase or decrease—

		Number Unemployed		*Average for Year*
1922	January	13,000		
	April	14,500		
	August	11,500		12,000
	November	13,000		
1923	March	9,500		
	May	11,500		9,250
	December	6,000		
1924	February	7,500		
	March	6,500		
	July	11,500		8,750
	December	6,500		
1925	February	9,500	Average for 1st 6 months 10,500	9,250
	June	12,500		
	December	5,000	for last 6 months 8,000	

The number unemployed at the end of 1925 was lower than at any other time during the four years for which records are available.

ANALYSIS OF IMPORT TRADE.

The comparative statement on page 90 shows the principal classes of the imports to New South Wales in the last three years.

This comparison shows that while there have been comparatively small increases under most of the

Classification	1921–22	1922–23	1923–24	1924–25
	£	£	£	£
Machines, Vehicles, Metals, manufactured and unmanufactured	9,317	12,998	16,637	23,079
Apparel, Textiles, etc.	12,298	15,513	13,243	14,029
Food and Drink	2,877	3,574	4,273	4,089
Tobacco and Alcoholic Liquors	2,466	2,389	3,192	2,792
Oils, etc.	2,047	2,378	2,837	2,984
Paper, Books, etc.	2,127	2,840	2,728	3,034
Timber, etc.	1,663	1,961	2,610	2,243
Raw Materials	3,022	2,305	2,366	2,458
Jewellery, etc., Optical and other Instruments	1,565	1,953	2,118	2,305
Bags, Sacks, etc.	735	2,042	1,585	2,151
Rubber Goods	539	949	1,324	1,217
Drugs, Chemicals, and Fertilizers	1,345	1,398	1,320	1,368
Earthenware, China, Glass, etc.	856	902	1,002	1,074
Miscellaneous	2,464	3,808	2,990	3,498
	£43,321	£55,010	£58,225	£66,321

principal headings, more than one half of the increase in 1924–25 as compared with 1921–22 was due to the importation of machinery, vehicles, and manufactures of metals, which are used mainly for developmental purposes. The rapid increase of this large item, which now constitutes more than one-third of the total imports, is striking evidence of the healthy growth that is proceeding in the State's industries.

A large increase has occurred in the importation of motor vehicles, attributed to the extended use of motor vehicles for purposes of industrial traction and commercial transport as well as for pleasure, the increase in motor lorries, motor vans, and motor 'buses having been proportionately very much larger than the increase in the number of motor-cars, many of which, of course, are used for business purposes.

A further useful guide to general well-being is the earning power of investments. At current prices, these approximate 7 per cent on coal, 6½ per cent on steamships and manufacturing, 6 per cent on trading, 5¼ per cent on Government stocks and banks, and a shade under 5 per cent on insurance company stock. What little variation there has been in these prices during the past two years indicates a general tendency that investors are willing to pay higher prices with, of course, correspondingly lower returns.

Before concluding, I would like to refer in more general terms to the chief of our primary industries, the first of which is, of course, wool growing, though agriculture and dairying have developed very rapidly during the past twenty years.

The pastoral industry, which caused the original spread of settlement over the State, is still maintained in every part of it, though it diminishes in importance from the sole industry in the west to a secondary position in the central and eastern divisions, where agriculture and dairying are assuming greater importance. The State has had in the past flocks of sheep more numerous than at present, nevertheless the quantity of wool produced has been more or less well maintained by the increased yield of wool per sheep, and the value of the output has been increased. New South Wales is pre-eminently the first merino wool-producing country of the world.

The pastoral industry has been greatly helped by the exploitation by the Government, and also private owners, of the artesian water basin, which covers approximately 70,000 square miles of the State. There are about 381 bores flowing and discharging 81,000,000 gallons per day; while there are a further 129 giving a pumping supply. The depth of these bores ranges from 90 to 4,000 ft. In addition to this, over 1,000 successful shallow bores have been sunk on small

holdings for the supply of water for stock and other purposes.

The natural conditions in New South Wales are highly favourable for the dairying industry, where stock does not require housing or hand-feeding during the winter, as in colder countries. The Government is very strictly insisting on improving the quality of New South Wales dairy produce, and of all the butter produced, 80 per cent of the total output is choicest grade, 6 per cent first grade, and 4 per cent second grade. Seventy-two millions six hundred thousand pounds were produced in 1924. Cheese-making conditions are excellent, and in the near future this industry is expected to develop as has butter production. Six million pounds of cheese were produced in 1924.

The raising of cattle, horses, and pigs is a very important aspect of our rural activities. In 1924 there were in New South Wales 2,938,000 cattle; 658,000 horses; and 323,196 pigs.

The conditions are ideal in New South Wales for the production of fruit and vegetables, and the production of fruit was valued in 1924 at nearly £2,000,000. All varieties excel, the chief being apples, oranges, peaches, pears, cherries, plums, apricots, passion fruit, etc., and the fruit canning industry is assuming large proportions.

The usual vegetables commonly in use in this country grow to perfection. With the growth of population and the extension of irrigation, produce of this type has great possibilities ahead.

The coalfields of New South Wales are the most important in Australia both as regards extent and as regards the quantity and quality of the coal produced. During 1924, 11,600,000 tons, valued at £9,500,000, were produced.

Deposits of oil shale in New South Wales are extensive and rich, though it is not economically possible to work them at the moment. Silver, lead, and zinc are

produced at Broken Hill, one of the principal mining centres of the world; the value of the output from these mines in 1924 was £5,043,000, and during 1925 £6,500,000.

New South Wales also produces gold, copper, tin, iron, and has deposits of chromite, tungsten, manganese, molybdenum, etc., which have yielded considerable returns in the past, and await further development.

Opals in large quantities and diamonds have been mined in New South Wales, which also has large deposits of marble, limestone, fireclays, etc. The cement industry is making noteworthy progress, production being 304,089 tons, valued at £1,320,698 in 1925.

The forestry resources of New South Wales, especially in hardwoods, are very valuable, and the industry is now controlled by an independent Commission, which has commenced a policy of re-afforestation which has immense potential possibilities for the State.

The coastal waters of New South Wales have been explored for the possibility of extending the fishing industry, and trawling, at first developed by the State and latterly taken over by private enterprise, is becoming a highly successful industry.

I have said enough, I hope, to convey some idea of the possibilities of New South Wales. The further development of the mineral and other resources of New South Wales only awaits the growth of population and the investment of fresh capital. We in New South Wales hope that Britons and British capital will take pride of place in this development.

(*Lecturer:* J. W. FERGUSON.)

THE ECONOMIC POSITION OF VICTORIA

In lecturing on any subject it is rather difficult to leave the "ego" out of it, and quite naturally the audience, particularly if the lecturer be a stranger, desires to know with what knowledge and what authority he speaks; therefore a little personal explanation may not be out of place, and as I am to deal with the economic position of Victoria, I may tell you that I am a native of that State, having been born at Portland, the cradle of Victoria, so long ago that I prefer to forget it. My parents landed there seventy-three years ago, and, although they remained staunch Britishers to the end of their days, and inculcated in me a love for this country, they had no desire to return to it, but became ardent Australians. I entered the Crown Lands Department of the Public Service as a boy, and worked upwards through all the grades, until, finally, three years ago, I was appointed by the Victorian Government as its special representative attached to the Migration Department at Australia House, London. There is scarcely a town of any importance in Victoria that I have not visited, or a river that I have not traversed, hardly a mile of the 5,000 miles of railway that I have not travelled over, besides travelling thousands of miles by car and coach. I have been the means of settling more men on the land in Victoria than anyone living, and I claim to know my State as few men know it, and if one can form correct conclusions in a lifetime's personal study of one's country any comments I may have to offer should be of some value.

HISTORY.

The coast of Victoria was first sighted by Captain Cook in 1770, when it was annexed, and it remained—as the Port Phillip District—part of the province of New South Wales until 1851, when with a total population of only 76,162, of whom 23,000 were in Melbourne, two most important events happened. Victoria was created a separate colony, and payable gold was discovered, and the enormous progress that it has made, since what was known as the gold fever abated, is practically coincident with my own life, for it has been my pleasure and privilege to personally meet that magnificent pioneer, Edward Henty, the first white man that ever settled in Victoria. The occasion of our meeting was a treat which he gave to the school children of Portland, when he shook hands with, and gave a bag of sweets to, each one of us. Incidentally, I might mention that my brother, J. L. Wyatt, who was also born in Portland, is its present mayor, and for some years occupied "Bewsall" Henty's fine old home, where I have spent a very pleasant holiday myself. The Australian pioneer was an empire builder with pluck, endurance, vision, and a constructive spirit, who "builded better than he knew." He searched the world for stock and fodder suitable for the climate, always aiming at improvement, being satisfied with nothing but the best, and consolidating his gains from year to year.

Here are two different opinions of Australia by two of the first official settlers, Governor Phillip and Major Ross, one of his staff. The latter wrote: "If the Minister has a true and just description given to him of it (the country), he will not surely think of sending any more people here—for there was not one article that can ever be necessary for the use of man but which must be imported into the country." Against opposition of this character, and against conspiracy,

all kinds of hardship, and an unsympathetic home authority, Phillip stood alone in his belief in the new land and wrote : " The climate is equal to the finest in Europe . . . all the plants and fruit trees brought from Brazil and the Cape thrive exceptionally well, and we do not want for vegetables. The Colony is the most valuable acquisition Great Britain ever made." Time is rapidly confirming this opinion, and I make bold to say that should England lose all of her oversea dominions with the exception of Australia she would, if it be properly organized and developed, still retain sufficient to keep her great, for this vast possession is as large as the United States, about three-quarters the size of Europe, and is peopled by the most virile, energetic, and intensely loyal of her citizens, whose wealth production is already valued at over £400,000,000 per annum, or nearly £70 per head of its 6,000,000 inhabitants, a higher figure than can be shown by any other country in the world. A country that will grow anything that can be grown in any other part of the world, and in which every known mineral is found, and the potential wealth of which no one can calculate. Lord Northcliffe, whilst on a visit to Australia, wrote : " I cannot understand anyone staying at home who has the money to be here with," and Sir W. Beach Thomas, who was out there as special commissioner of *The Times* and *Daily Mail*, described it as the primary producer's paradise, and said : " The moral of it all is that if we knew in Britain what Australia offers we should want to come in mobs to help develop its buried wealth, and it cannot but be good for a country and all in it that this wealth should be made available." It is, with the exception of its sister Dominion —New Zealand—the healthiest country in the world, the death rate being 9·5 per thousand compared with 12·2 in England. It is a country with no race problem, its aborigines are a negligible quantity, and no coloured

people are allowed to enter it, a country whose population is 97 per cent British or of British descent, a country more British than Britain itself—a great white country, and an outlet for the surplus virile British population. Let us keep it white and let us keep it British. No part of this vast country has been more sanely governed, or developed with so much wisdom and good statesmanship, as the little State of Victoria, making it one of the most populous, economically progressive and advanced agricultural States of the Commonwealth, and one which offers to the newcomer the advantages possessed by older countries and many more; but he must not be timid or irresolute, but must possess all the worthy characteristics of those of his race that have preceded him—courage, optimism, resourcefulness, patience, and adaptability.

Size, Climate, Etc.

Victoria is, with the exception of the Island of Tasmania, the smallest State in the Commonwealth of Australia. It is so small compared with the other big States, that their residents always contemptuously refer to it as "the cabbage garden," and they do this, not as a tribute to its fertility but because, compared with their own vastness, they consider it is only big enough for such a garden; but small as it is, it contains 87,884 square miles, and is equal to the combined areas of England, Scotland, and Wales. Yet it forms only one thirty-fourth part of this great island continent, and whereas those three countries have a population of 485 persons to the square mile, Victoria has nineteen, or a total of 1,700,000 souls, and yet it is easily the most densely peopled of all the States. Even its comparatively small size is in some ways an advantage as, owing to the compactness of its population, the closer settlement and irrigation schemes are easier to organize, cultivation is more intense, the railways do more business per mile,

and it can be more efficiently and economically administered. It is the most southerly of the States on the mainland, lying between latitudes 34° and 39° south, is some 2,000 miles from the Equator, and enjoys the most temperate climate of all the States, and one of the finest in the world. The average annual rainfall in Melbourne, the capital, is 25·65 in. compared with 23·80 in. in London. The average summer temperature is 66·6° or 5½° hotter than that of London, and the average winter temperature is 50·1° or 11° hotter than London, and the mean temperature for the year is 58°. There is no snow, except in the highlands for a short period in the winter.

GOVERNMENT.

Victoria has, from the first, been fortunate in the selection of its legislators. Many of them have been endowed with ability, foresight, and strength of character, not formulating hare-brained schemes and legislating for the immediate present, but with the vision of statesmen have paid due regard to the heritage within their keeping. Take, for example, education. In the primary schools, of which there are some 2,700, the education is free, secular, and compulsory, and of a high standard, and in order that the children of the man who has gone out back on the land may be at no disadvantage, if there be twelve children of school age in a district distant more than three miles from a school, the Government will build a school and provide a teacher for them; and if there be fewer than twelve, will in some cases pay the parent a small sum per week to convey his children to the nearest school and, by winning one of the many scholarships offered by the Government, the child of more than average intelligence may go right through to the university without cost to the parents. In addition, the State has established higher elementary schools, high schools, technical

schools, agricultural high schools, agricultural colleges, and schools of art and domestic economy. Then there are nearly 500 private and secondary schools. Some of these are very fine, and the education and traditions are up to the best English standard. All scholars are medically examined periodically, and so much is thought of education in the State that 98 per cent of the population over 10 years of age can read and write.

Again, take the opening up of the country by the construction of railways, roads, water channels, etc., and making the Crown lands available to the settler on the easiest possible terms to encourage settlement, recognizing that the primary producer is the best asset the State can possibly have, because the foundation of a nation's greatness depends upon the successful exploitation of its primary wealth, and if a country is to be judged by the happiness and prosperity of its people, Victoria is one of the best governed communities in the world. Its credit is sound, its people work under ideal conditions, its industries are on a firm basis, and its standard of living of the highest. To take the acid test of taxation—this is what Sir Wm. McPherson, an ex-Treasurer of Victoria, said in a newspaper article: "Judged from this standpoint, Victoria is probably in a happier position than any of the other States, or, for that matter, any other nation in the world." (A comparison of the income-tax, a test that comes home to everyone, makes this tolerably clear. In the table on page 100 are the figures for the Commonwealth and the various States on income ranging from £200 to £5,000 per year.)

And he adds, "Victoria is probably in a better financial position than any other country in the world"; and this is from a man who was in a position to know, and although the State income-tax has been slightly increased since the article was written, the relative positions are practically the same. A great deal has

Taxable Income	£200			£500			£1,000			£5,000		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Commonwealth .	5	6	8	17	6	7	47	19	9	773	2	10
N.S.W. . .	12	10	–	31	5	–	63	15	–	380	16	8
Victoria . .	2	10	–	6	5	–	18	15	–	133	16	8
Queensland .	6	–	–	21	15	–	60	–	–	780	–	–
S. Australia. .	5	4	2	14	1	3	35	8	4	327	1	8
W. Australia .		3	4	10	10	10	35	9	2	252	5	10
Tasmania . .	3	13	4	13	1	3	31	12	6	294	0	5

been said and written concerning the borrowings of the Governments of Australia. One man who has gained some eminence as a writer after a recent tour, and after mentioning its great possibilities, said that Australia is living in a fool's paradise on borrowed money, that she owes £1,000,000,000, and the day of reckoning will come. He did not tell his readers that Australia spent £565,000,000 in equipping and maintaining 400,000 men in the Great War, although he would probably have had something to say if she had not done so. And without going more fully into figures than is absolutely necessary, I propose to show that practically the whole of the public debt of Victoria, apart from its share of the war debt, is represented by tangible assets.

In the first place, it is necessary to point out that, in Victoria, such public services as railways, waterworks, and to a large and increasing extent electricity supply, are owned and run by the State, and as the revenue derived from these undertakings suffices to meet working expenses, plus interest, the capital invested therein should no more be regarded as public debt, in the accepted sense of the term, than should the capital of a British railway be added to the public debt of the United Kingdom. The steady growth of the public debt of Victoria, so long as the additional amount is judicially expended on reproductive works, as has been done in the past, may be regarded as just

as healthy a sign of progress and development as would be the increase of capital of an English railway company for the purpose of extending its system.

It is interesting to note the increasing ability of the State to finance its own developmental undertakings without relying so much as formerly on external borrowing. This tendency is demonstrated by the fact that whilst on 30th June, 1901, 89 per cent of the entire public debt had been raised in London, it had decreased to 40 per cent on 30th June, 1925, and during this period of twenty-four years Victoria's debt to the English investor had increased only by £5,000,000 to a total of about £52,000,000.

PUBLIC DEBT.

The following is a statement of the public debt of Victoria as at 30th June, 1925, viz.—

PUBLIC DEBT OF VICTORIA

As at 30th June, 1925		£	s.	d.
Railways		67,852,641	13	9
State Coal Mines		242,954	9	7
Waterworks		15,691,951	13	10
Electricity Supply		7,823,425	19	6
Closer Settlement	£5,974,114 6 –			
Discharged Soldiers' Settlement	21,188,533 11 4			
		27,162,647	17	4
Roads		5,674,807	9	7
Public Works		5,942,849	15	9
In Aid of Revenue		778,285	11	7
		£131,169,564	10	11

	Amount	*Annual Interest*
	£	£
Raised in London	51,869,204	2,104,561
,, Melbourne	79,300,361	3,790,631
Total as above	£131,169,565	£5,895,192

POPULATION, 1,641,852

	£	s.	d.
Debt per head—State Loans	79	17	10
Commonwealth Loans	68	10	11
Total	£148	8	9
Australia as a whole, Debt per head	£170	–	–
New Zealand ,, ,, ,,	£180	–	–

So that in Victoria the debt is nearly £22 per head less than that of Australia as a whole, and £32 less than that of New Zealand. The private wealth of Australia was estimated in 1921 at £5,457,000,000, or £397 per head of the then population. Of this wealth Victoria's share was £1,537,000,000, or £408 per head.

BANKING.

Perhaps no better indication can be given of the prosperity of a country than the story told by its banks. There are sixteen banks established in Victoria with 880 branches, and the total amount deposited with them is £93,000,000. In addition to that, the State Savings Bank, commonly known as the People's Bank, has out of a present population of 1,700,000 no fewer than 1,100,000 depositors with £57,000,000 to their credit, and the Commonwealth Savings Bank holds Victorian deposits amounting to another £13,000,000, or a total in all banks of £163,000,000.

The various friendly societies have a membership of 154,000, with funds amounting to £3,850,000, life assurance policies number 692,000, and the amount assured is £85,000,000. The wealth of the people is most strikingly illustrated by the returns of property left by deceased persons. During 1925 the net amount left by males was £10,796,000, or £1,182 for each death and for females £4,275,000, or £529 per head.

GOLD.

Victoria has been one of the greatest gold-producing countries in the world. The total value of the gold produced to date amounts to the stupendous sum of £302,000,000, or nearly half of the total production of Australia. However, the fleeting days of gold are gone, but the golden days are here; that is to say, the days when gold, which gave the country its first great impetus and was its chief export, have given way to the days of the golden fleece, the golden grain, the golden butter, and the golden fruit, which have placed the country in an everlastingly safer, surer, and more generally prosperous and happy position.

PRODUCTIONS.

The State had, in March, 1925, the following live stock, viz.: 473,000 horses, 760,000 dairy cows, 846,000 other cattle, 12,650,000 sheep, and 288,000 pigs. It produced 87,000,000 lb. of butter, 7,250,000 lb. of cheese, 23,000,000 lb. of ham and bacon, 83,000,000 lb. of wool, and this year has 3,043,000 acres under wheat estimated to yield 60,000,000 bushels, and 1,300,000 acres under oats. In addition, it produces large quantities of potatoes, onions, fruit, including apples, pears, plums, oranges, lemons, grapes for raisins, currants, and wine, whilst fat lamb raising, poultry farming, bee keeping, are extensively carried on, and maize, hops, tobacco, broom-corn, flax, and fodder crops are extensively grown. It is impossible to deal with the economic position of any country without quoting figures, and I must ask you to bear with me still further for a few minutes whilst I do so—the figures quoted are the latest available, and I shall give them in round numbers. On the following pages is the official estimate in pounds sterling of the value of Victoria's products for the year 1924–25.

VICTORIAN PRODUCTS, 1924–25

	Estimated Value to Producer	*Value*
CULTIVATION—		£
Wheat		11,993,546
Oats		934,538
Barley, Malting		258,263
Barley, Other		95,743
Maize		137,948
Other Cereals		53,227
Grass and Clover Seed		3,886
Potatoes		682,878
Onions		209,803
Other Root Crops		12,340
Hay		3,639,496
Straw		66,920
Green Forage		497,655
Tobacco		49,120
Grapes not made into Wine, Raisins, etc.		45,372
Raisins, Ordinary		57,867
,, Sultanas		733,919
Currants		110,099
Wine		153,986
Hops		53,000
Other Crops		78,848
Fruit grown for sale in orchards and gardens		1,091,508
,, ,, in private orchards and gardens		9,945
Produce of market gardens		731,000
Less deductions of value of Hay and Manure used		3,535,135
Total		£18,165,772

DAIRYING AND PASTORAL—	£
Milk consumed in natural state	1,784,590
Butter made	6,618,240
Cheese made	204,890
Cream used (not for butter)	190,540
Condensed, Concentrated, Powdered Milk, etc., and Casein	1,582,915
Cattle	3,538,240
Pigs	1,588,620
Sheep (without wool)	4,390,880
Wool produced	11,440,240
Less deductions of value of Hay, Bran, and Pollard, etc., used	1,723,178
Total	£29,615,977

MINING—	
Gold	285,316
Coal	610,671
Stone from quarries, including Lime Stone	530,820
Other Metals and Minerals	41,848
Total	£1,468,655
FORESTS—	
Timber (Forest Saw-mills only)	745,580
Firewood (estimated)	1,053,870
Bark for tanning	132,935
Total	£1,932,385
MISCELLANEOUS—	
Honey	76,036
Beeswax	2,945
Poultry and Eggs (estimated)	4,443,200
Rabbits and Hares	403,680
Fish	144,582
Crayfish and Oysters	19,714
Total	£5,090,157
Total value of primary products	56,272,946
Manufacturing—Value added during process	45,271,348
Grand total	£101,544,294

There are 7,300 factories employing 157,000 hands. The wages paid exceed £27,000,000, and the value of the output is £114,000,000. The railways, which are State owned, have increased from 276 miles in the early seventies to nearly 5,000 miles to-day, have cost £68,000,000 and earn £13,000,000 per annum, and for years have paid both working expenses and interest on the capital invested. The oversea trade has increased in ten years as follows—

	1914–15	1924–15
	£	£
Value of Imports	21,050,310	54,360,000
" Exports	12,350,000	40,401,000
Total oversea trade	33,400,000	94,761,000

POSTAL—

Number of Post Offices	1,774
Letters dealt with during the year	196,000,000
Newspapers	41,000,000
Telegrams sent	4,310,000
Telephone subscribers	71,138

Victoria produces 36 per cent of the Commonwealth Butter
" " 33 " " " Manufactures
" " 29 " " " Wheat
" " 22 " " " Fruit
" " 15 " " " Wool
though covering less than 3 per cent of its area.

SCOPE FOR LABOUR.

With the increase of population, with good coal resources and a protective tariff, enormous manufacturing industries have been built up, many leading English companies have established branches, and new ones are springing up every year. Good wages and reasonable hours are fixed by Wages Boards. The scope for labour is wider and freer than in this country, and the industrious worker may rise to the highest position in the State. Take the year 1911 as a base, and let 1,000 be the weighted average wage for Australia. In Victoria it was 985, whereas in 1924 it was 1,862, the only State exceeding it being Queensland with 1,868, the increase in the period being 89 per cent, whilst the cost of housing, food, and groceries increased 80·1 per cent. The average wage for males for 47 hours' work was 2s. 1d. per hour and for females 46 hours' work was 1s. 1d. per hour.

Notwithstanding all that has been done already, the wonderful resources of the State, the manifold material wealth, and the variety of industry that have won prosperity for its people from those resources, despite economic perplexities that are shared with the rest of the world, this country is only in the initial stages of development and offers a splendid opportunity for the investment of capital.

PREFERENCE.

Whilst not wishing to trench on political matters, I am of the opinion that a more substantial preference to Dominion products would go a long way towards solving the problem of land settlement, not only in Victoria but in Australia as a whole. Take, for example, the dried fruits industry, when we were only producing sufficient currants, raisins, and sultanas for our own requirements and for New Zealand and Tasmania, men were making fortunes, and making them rapidly, and vineyards in full bearing sold up to £400 per acre, but so soon as we over-produced and had to look abroad for a market for the surplus, we came into competition with the nations where wages and the standard of living are not nearly so high as ours, and which are only a third of the distance from this country, with the result that our producers could always be undersold, and they had a pretty thin time, but with the preference granted to Dominion products by this country last year our sultana growers had quite a profitable season, and it must be remembered in this connection that Australia gives a preference amounting to many millions of pounds to the British manufacturer, and is, with the single exception of India, which has fifty times the population, the best customer that Britain has for her manufactured goods.

DISTRIBUTION OF POPULATION.

Australia, with an area of nearly 3,000,000 square miles and a population of 6,000,000 people, or two to the square mile, is the most sparsely populated of the civilized countries of the world. For the other countries the densities are approximately: Europe, 121; Asia, 63; Africa, 11; North and Central America, 18; and South America, 9. The distribution of Australia's population is a question that makes many political

economists and others nervously anxious for its future. It is pointed out that in Australia 62·10 per cent of the population is urban and only 37·90 per cent rural. In New South Wales the percentage is 67·80 urban and 32·20 rural, and in Victoria 62·29 urban and 37·71 rural. This is called by many the curse of centralization, but to my mind it is simply one of the effects of applied science and invention involving vast changes brought about by modern methods of dealing with primary products which have a marked effect in increasing the output per unit of labour employed.

As Clair S. Adams, an American writer, says—

> Within scarcely more than a generation, improved machinery, transportation, and communication have changed the world, and in no place has it wrought greater changes than on the farm. Within the memory of men now living, greater changes have been wrought in the way of production and marketing of farm products than in all the generations preceding. In the childhood of these men grain was harvested with the sickle, much as it was 3,000 years ago when Ruth gleaned the fields of Boaz, whilst the slow-moving wagon carried the harvest to market. Now with improved farm machinery, railroads, steamships, and electricity, one wonders what the next invention may be.

Studies made by the United States Department of Labour show that by the methods used in 1830, 100 hours of labour would produce 46·5 bushels of barley, whereas in 1896 it would produce 1,100 bushels, and in the production of wheat each day's labour brought in $3\frac{1}{2}$ bushels in 1830 and 60 bushels in 1896, but in Australia one man's labour will put in and take off a much bigger area of wheat than in any other country.

It is pointed out, correctly, that as men have been released from farm labour they have sought other employment and have found it in the factories and town occupations, and the farmer regards each one as a vanishing competitor to appear in the town as a customer, and on the other hand more land is

cultivated with less labour as the result of the use of improved implements.

Victoria's situation at the antipodes confers upon her primary producers a great advantage by reason of her seasons of prolific production concurring with the annual periods of scarcity in countries of the Northern Hemisphere. The climate and other conditions in the great wheat belt lend themselves to the use of large labour-saving implements, and crops are seeded and harvested at a very low expense ratio, notwithstanding the high price of labour. Live stock remain in the fields the whole year, and in no other country in the world do they thrive better or multiply so freely and are so free from disease. It also has the great advantage over colder countries where farm work is held up for months. In this favoured State farm work proceeds throughout the year, and this means increased production.

At the census of 1921, 50·05 per cent of the population of Victoria was resident in Melbourne, the capital, but this is common to all the States, though in a varying degree, and is one of the direct effects of the development of manufacturing industries in concentrating the population in places offering the greatest facilities for the production of particular commodities, and as these industries are as yet in their infancy the tendency is to concentrate the manufacturing establishments in each metropolis. This has accentuated the growth of the capital cities to an extent which, compared with the rest of the country, appears somewhat abnormal.

The population of Victoria was, in 1851, when it became a separate colony, 76,162; in 1860 it had reached 538,234; in 1890, 1,133,728; and to-day is over 1,700,000. In America the shift from country to cities is much the same as in Australia. The percentage engaged in agriculture in 1820 was 87·1; in 1880, 44·4; in 1910, 32·9; and in 1920, estimated at 30.

It was not until the "nineties" that the way was found for the realization of the value of pastoral products by the installation of refrigeration on ships. At this time the baneful effects of land aggregation became apparent, great areas of valuable arable land were locked up and used solely for pastoral purposes, and this at a time when the dairying industry was forging ahead owing to the adoption of co-operative methods; and when the Victorian Government was laying the foundations for the settling of one of its problems by vast national schemes for the conservation and distribution of water for irrigation and domestic stock supply. This necessitated a wide measure of economic reconstruction which took the form of a Closer Settlement Act, giving the Government power to resume large areas of privately-owned land, by equitable purchase, to be subdivided into living area farms and disposed of on exceptionally liberal terms, and with power to grant monetary assistance for the purpose of improving them, and for the purchase of stock and implements. This movement stands to-day as probably the most progressive and soundest step ever taken for the development of landed industries. As the Hon. H. S. W. Lawson, ex-Premier of Victoria, said in Parliament—

> To a large extent the happiness and welfare of the people depend upon the use we make of our material advantages, and of the natural resources which are ours to use and develop. Honourable members know what an advantage closer settlement is in any district, how districts have gained socially by it, how it has made greater attractiveness in country life. It has been a marvellous stimulus to progress also in the market towns in the vicinity and has made life on the land more livable and complete.

Conservation of Water.

One of the great problems of Australia is the conservation of water that has hitherto run to waste in

the rainy season. A glance at the map will show how the Murray River dominates practically the whole of the south-east of Australia, including half of Victoria up to the Great Dividing Range. It is Australia's great waterway, and is full of possibilities, and its valley is capable of carrying 10,000,000 people. With the completion of the scheme for locking the Murray and the making of the Hume Reservoir, which will be one of the largest reservoirs in the world, and will impound four and a half times as much water as there is in New York Harbour, a scheme which may cost £11,000,000, we shall begin at last to really understand the meaning of water conservation and will find the Murray taking its place as the chief agent in closer settlement and solving one of the problems of migration. The pioneer expedient in water conservation is to construct tanks to catch the rains of winter, but the porous sandy soils drink up nearly all the rain that falls. Such a region is the Mallee district of Victoria, so named from the stunted eucalypt, which covers millions of acres. The opening up of this country is quite a romance. Some years ago it was fenced off from the rest of Victoria by what is called a vermin-proof fence to keep the rabbits, foxes, kangaroos, etc., from over-running the settled area farther south; but with the invention of the stump jump plough and the Mallee roller, and the making of water channels through it, a new province was added to Victoria, and what in my school days was described on the maps as a desert covered with dense *Eucalyptus dumosa* is now one of the chief wheat-growing areas of Australia, where, at the present moment, the ears of wheat on more than 1,250,000 acres are filling for what is anticipated will be a record harvest. This is made possible by what Professor Elwood Mead, one of the greatest authorities in the world on irrigation, and who was for several years in charge of this branch

of the Victorian Government's activities, described as one of the most comprehensive schemes for domestic and stock water supply for farms to be found anywhere in the world.

An area of 12,000 square miles, or 7,680,000 acres, gets its water supply from 5,000 miles of channels which carry water from a number of reservoirs in the highland to the south to over thirty towns and hundreds of farms. In the longest of these channels the water travels 300 miles. Before this system was inaugurated the land was not safe, even for grazing purposes. As an instance of what irrigation will do, I have only to cite one case. The Shepparton estate, comprising 10,700 acres, which supported only twenty-four families prior to irrigation, now supports 330 families, and is not yet fully developed.

IMMIGRATION.

Under present conditions the attempt to solve the problem of migration by land settlement, although doing wonders, is altogether too costly to be successful on a grand scale. Victoria being a small State, and the most closely settled one, can absorb more land settlers only either by going to enormous expense in developing its rough hilly country, which is at present difficult of access and mostly situated far from railway communication, or by continuing the policy of repurchasing the larger estates, sub-dividing them into small farms and reselling on easy terms as well as making advances to improve and work them. In this connection the Government of Victoria has already spent, in round figures, £20,000,000 in the repurchase of land and £8,000,000 in advances to improve and work the farms, or a total of £28,000,000, to settle about 14,000 families, or £2,000 per settler, and, according to a report of a Royal Commission, which has recently been dealing with soldier settlement in Victoria, this is not

considered sufficient. (Of course, most of this money will be repaid to the Government by the settlers, but the initial expenditure is the difficulty.) But these are facts which must be taken into consideration by legislators and others with heaven-sent schemes for transferring the surplus population of overstocked Britain to become farmers in the Dominions; and, to my mind, to send people out in thousands without due regard to the ability of the Dominions to absorb them is not only a mistake but a crime.

GOVERNMENT.

It is impossible in a short lecture to go into details of the government of Victoria, which for the most part is modelled on the English system. Considerable attention has been devoted to industrial legislation to solve the economic problems of modern civilization, and many Acts are on the Victorian Statute Book which are still the dreams of reformers in other lands. The administration of the Customs, Defence, Post and Telegraph Departments passed to the Commonwealth Government with Federation in 1900, but the State retains her Courts, Police, University, Public Libraries, Museums, Art Galleries, Reformatories, Gaols, Harbour and Tramway Trusts, Railways, Education, Lands, Water Supply, Treasury, Health, Public Works, Agricultural, and Mines Departments. The State is divided into urban and rural municipal districts. There are fifty-three cities, towns, and boroughs, and 147 shires. The councils of these municipalities are empowered to levy rates, receive fees, etc., and their chief functions are the maintenance and control of streets, roads, bridges, ferries, culverts, sewers, drains, etc., within their boundaries. Nor will time permit me to deal with such activities as shipping, the air services, wireless and telephone services, bush nursing, old-age

and invalid pensions, philanthropy, which is not relegated to the caprice of the individual but is overlooked or carried out by the State, so that extreme pauperism, so common elsewhere, is unknown in Victoria. Nor can I dilate on its scenery more than to say that the tourist will find it a country of great beauty and charm, magnificent mountain views, delightful rivers, glorious waterfalls, and wonderful caves, all made easily accessible by a splendid system of railways and roads, with towns and villages at frequent intervals.

The dominant problem of to-day for the British Empire is the successful settlement of the vast unoccupied spaces of the Dominions with the surplus population of our own race, and in the effective occupation and development of its national resources. No country in the world offers greater opportunities than Australia, where the lure is strong and the reward rich.

As the Right Hon. S. M. Bruce, Prime Minister of Australia, said—

> What is wanted is to take the matter in hand and really concentrate on Empire development. Make the Empire with the immensity and range of its imperial resources still more glorious and a more potent influence for the good of its citizens and a beneficially powerful factor in the affairs of the world.

In conclusion, I should like to say how delighted I have been to have had the opportunity of visiting this wonderful and glorious old country, which is still probably the richest in the world, certainly the most beautiful in the world, as it is the first to pour out its blood and treasure in support or defence of a principle, and foremost in all projects which have for their object the betterment of the world; a country which we Australians are always proud to call "home." I have travelled it from one end to the other many times and

find it full of wealth, beauty, and tradition, of archaeological and historic interest, but notwithstanding all this Australia calls me, and I shall return to that great brown land, certainly a better educated man, I hope a wiser man, and above all a better Empire man.

(*Lecturer:* T. E. WYATT.)

THE ECONOMIC POSITION OF NEW ZEALAND

I WELCOME the opportunity afforded me of speaking to this gathering to-day upon the economic development of New Zealand. It is very gratifying to find an institution such as this providing in its syllabus for a series of lectures designed to propagate knowledge of a useful character regarding our Empire.

EARLY HISTORY.

New Zealand, as you no doubt know, is one of the smallest of the Dominions, though in saying that I should state that in area it is approximately the size of the United Kingdom. Although Tasman first discovered New Zealand in 1642; and, later, Cook, the great British explorer, paid four visits to the island in the late seventies, the settlement of the country was not seriously undertaken until the year 1840, when the British flag was planted there, in the Auckland province, by Captain Hobson, who had been appointed by Britain as the first Lieutenant-Governor. In that year a number of ships landed British emigrants at Wellington and Auckland, and these parties were followed at intervals by other bands who settled in the Nelson, Taranaki, Otago, and Canterbury provinces. New Zealand's settlement, therefore, dates from the year 1840. In the intervening period of eighty-six years she has risen, through the industry, enterprise, and the thrift of her people, from a state of savagery to the position of being one of Britain's leading suppliers of important foodstuffs, and of a community standing in the front rank of civilized countries.

Opening Up the Country.

New Zealand's first great task was the opening up and settlement of the country. This, owing to the fact that New Zealand is fairly mountainous, proved an extremely costly and comparatively slow undertaking. But in spite of that, the Dominion to-day is well supplied with both railways and roads. In places the railways have had to climb the mountain ranges, and, in others, expensive tunnelling has had to be resorted to. The railways exhibit many great engineering feats. In the South Island, for instance, the line which connects the east and west coasts pierces the Southern Alps by means of the Otira Tunnel, which is 5½ miles long. In many parts of the Dominion expensive viaducts have had to be constructed across great gorges, and in almost every part of the country there have been wide rivers to span. Practically all this work has been undertaken by the Government and carried out by New Zealand engineers. To-day, railway services are in operation from the extreme north of the Dominion to the extreme south, and branch lines extend out into most districts. New lines are still being constructed and others are waiting to be undertaken, chiefly in the North Island; but New Zealand may be said to be well served with a railway system which is up to date in every respect, and which leaves no important districts unprovided for.

The cost of this great enterprise has been approximately £50,000,000 sterling. Roads also have been constructed over the whole Dominion, and no part is inadequately served in this respect. This work also has been very costly. The result of it all is that New Zealand to-day, though her population is scarcely yet 1,500,000, is well settled throughout its length and breadth, and that remoteness from civilization, such as exists in larger countries, is practically unknown.

The total area of the Dominion is 66,000,000 acres, and of this 43,000,000 acres are under occupation. The unoccupied lands (23,000,000 acres) include mountain tops, river shingle beds, and other unproductive spaces; but it also includes a large area of forest, and much land that can yet be brought into profitable farming. It must not be inferred from this that New Zealand, being so well settled, offers little opportunity for new farming enterprises. Much of the land that is settled can be made increasingly productive, and there is immense scope for profit in many areas that at present are covered with tussock and other native grasses. There are also considerable tracts of pumice land in the North Island which are capable of remarkable yields under suitable treatment; and others which require only an extension of irrigation operations to enable them to be most profitably occupied. New Zealand, in short, is capable of carrying many more millions of people. Her soil is extremely fertile, and the climate is mild and equable, without distressing heat in summer and cold in winter. She experiences very few droughts and floods, and those that do very occasionally visit her are not extensive in their range, and affect her productive output scarcely at all.

POPULATION.

The population is widely distributed, and this means that there is no undue aggregation in the cities and towns to the disadvantage of the rural areas. The official analysis of 1921 gives the urban population as 48·7 per cent of the total and the rural as 51·23 per cent. Approximately 50 per cent of the Dominion's people live in the North Island and 40 per cent in the South Island. Auckland, in the north, has approximately 200,000 people; Wellington, the capital city in the centre of the Dominion, 125,000; Christchurch,

in the north of the South Island, about the same number; and Dunedin, in the south, a little less than 100,000.

All these cities are up to date in every respect; and so also are the secondary towns which are dotted over the country, with populations extending up to 25,000. They possess modern systems of water supply and sanitation, lighting, electric tramways, and motor services.

INDUSTRIES.

Pastoral and agricultural enterprise is the chief pursuit of the country, and its yields provide the Dominion's chief source of wealth. I have already stated that to-day New Zealand ranks very high in the world as a supplier of foodstuffs to Great Britain. Refrigeration, of course, has made this possible, and from the date of its application to ocean carriers in 1880, New Zealand has gone rapidly ahead. To-day her sheep number 25,000,000, and are about equal to the flocks of Great Britain, and her cattle 3,600,000. Last year (1925) the Dominion's exports were of a value of over £55,000,000, and of this amount wool contributed £17,750,000 sterling, frozen mutton and lamb, £11,000,000 sterling; butter, £10,250,000; and cheese, £6,000,000 sterling. It will thus be seen that New Zealand is primarily a grazing country, largely because better financial returns are obtained from the pastoral industry. Agriculture is carried on chiefly for the sustenance of the people and as a necessary adjunct to cattle and sheep grazing. Practically no agricultural products are exported. The land, nevertheless, is eminently suited for cropping, and few countries in the world have a better record of production per acre. It is impossible for New Zealand to compete in the world's markets with wheat that is grown upon vast areas of much cheaper lands than hers.

MINERALS, ETC.

The Dominion is very rich in minerals. There are vast coal deposits, which are widely distributed over the two islands. It is estimated that the resources in steaming coal exceed 700,000,000 tons. Each year there is a total production from the mines of a little over 2,000,000 tons. Many of the deposits, especially those on the west coast of the South Island, are the equal of the best Welsh coal. Iron ore is also found in certain parts in great quantities. One deposit, at Golden Bay, in the north of the South Island, is estimated at 64,000,000 tons. Operations are proceeding there at present. On the west coast of the North Island are inexhaustible deposits of iron-sand which yield a high proportion of iron. So far, economic methods of treating this sand to enable it to supply local needs cheaper than imported pig-iron have not yet been discovered. Gold is still obtained in considerable quantities in the Dominion, chiefly by mining, sluicing, and dredging, and the belief exists that persistent prospecting will reveal further deposits. New Zealand in the past had her gold rushes, and up to the present £90,000,000 worth has been exported. Petroleum is found in the Dominion ; but not yet in payable quantities. Many other economic minerals are deposited there, including silver, platinum, copper, tin, lead, zinc, mercury, molybdenum, tungsten, sulphur, asbestos, talc, etc., and marble and limestone exist in very large and valuable quantities. The deposits of minerals vary, but the time has not yet arrived for their economic exploitation. New Zealand, however, is not ignorant of her resources in this respect. Large areas of the country yet await geological investigation.

WATER-POWER.

One of her most valuable resources, and one which is being fully exploited by the Government, is her rich

endowment in water-power. The work of harnessing and applying this power has been proceeding for some years, but since the war a policy of concentration on works to supply the whole Dominion has been adopted. The full development of the schemes in progress to-day will give 237,000 horse-power, but this is by no means the sum total of the Dominion's resources, nor will it represent the horse-power used in the Dominion, as there are other plants in operation. The cost of this installation has been considerable, but it is a directly payable investment, and, besides, it furnishes the Dominion with comparatively cheap electrical motive power, lighting, and heating. Its uses are being extended to all country districts, so that farmers, as well as those in towns and cities, are endowed with its benefits. It drives the farmer's machinery, provides heat for his wife's domestic cooking, and it supplies the power for the urban factories and city trams, and many other requirements. The cost will become less as the capital charges are paid off. In this, as well as in her railways, telegraphic, telephonic, and many other enterprises, New Zealand has looked far ahead of her present requirements—to the time when her population will be very much larger than it is to-day.

Manufacturing Industry.

The Dominion's manufacturing industry has been gradually developed. In recent years there has been a more rapid advance. The country imports the greater share of its requirements in general manufactures, but woollen factories supply a large proportion of internal needs; and motor and cycle engineering, motor body-building, the manufacture of chemicals, brushware, and glassware, are new industries which are making rapid headway; and engineering and the manufacture of metal products, and leather goods, are increasing in importance.

AFFORESTATION.

Very considerable attention is being paid to afforestation, and large areas are being planted with introduced pines, which have a comparatively rapid growth in the favourable soil of the Dominion. It is estimated that some of the areas recently afforested will produce milling timber to the value of £500 an acre in a period of thirty years. There are great fish resources around the Dominion's coasts which have scarcely yet been developed.

DAIRY PRODUCE.

These few examples, which I have only lightly touched upon to avoid being wearisome, will provide some idea of what one may term the lesser economic resources of the Dominion. Some day perhaps they may assume greater proportions. But to-day her greatest economic wealth lies in her pastoral lands. I have already indicated this in the few figures I have supplied, showing the value of the exports from this class of industry. The greatest advance in recent years has been made in dairying. This advance has been achieved largely by co-operation, by the general use of modern mechanical aids, and by a rigid system of State inspection of the butter and cheese produced, to ensure its quality. In 1910, the butter exports were valued at £1,812,000, and in 1925 (last year) at £10,240,000. The cheese exports in 1910 were worth £1,195,000, and in 1925 £5,801,000. These figures show a very healthy growth, but, in addition, important side-lines of the industry have grown up in the manufacture of casein, dried milk, and preserved milk. Much of the drudgery of dairy farming has been overcome with the aid of the milking machine, by which over 700,000 of the Dominion's cows are milked each morning and night. Over 45,000 cream separators are also in use in the farmhouses.

If we turn to the other branches of the pastoral industry, we find that the value of wool exported rose from £8,608,000 in 1910 to £17,739,000 in 1925; and frozen meat from £3,851,000 to £11,215,000. The frozen meat in 1925 consisted almost entirely of mutton and lamb. At present an endeavour is being made to increase the export to Britain of pig-meats. The New Zealand frozen beef cannot compete at a payable price in the London market with the chilled article from countries closer at hand. Unfortunately, the distance is too great to enable it to come in a chilled condition.

OTHER EXPORTS.

New Zealand has many other export lines in her basket. The chief of these, with their export values, are as follows—

	£
Honey	53,000
Apples	116,000
Hides and Skins	2,500,000
Rabbit and Opossum Skins	930,000
Flax Fibre	574,000
Tallow	900,000
Kauri Gum	415,000
Timber	574,000

There are also many other smaller lines. All these lines are capable of very great expansion, and no opportunities are being lost in that direction at present in the Dominion.

TRADE.

It might prove interesting to you if I could devote two or three minutes to a few points upon our trade, particularly as inter-Empire trade is of such great moment at the present time. I will take last year's (1925) figures. Of her total exports of £55,000,000 odd,

£44,000,000 came to the Mother Country, consisting chiefly of the items which I have already mentioned. Of her imports of £52,000,000, £25,000,000, or practically half, were purchased from the Mother Country. If we take the imports from the British Empire, the proportion of British imports is very much higher, totalling £38,000,000 out of £52,000,000. This, I think you will agree, is exemplifying inter-Empire trade. As a matter of fact, no other overseas country can show such an example of the principle of inter-Empire trade. Our total trade per head is higher than that of any other country, viz., £77 for every man, woman, and child in the Dominion. Our imports from Great Britain total £18 5s. per head. These figures, taken in the light of our small population of under 1,500,000, give some indication, I think, of the industry and enterprise of the people, and also of the magnificent producing capacity of our country. And, while on this subject, may I say that New Zealand has built up her market in Great Britain from the days of her infancy; she has fostered it; and now looks to it for her future expansion and prosperity. Upon our success in holding our market over here, enabling each year's progressive increase to be absorbed, depends our capacity to go on purchasing British goods and absorbing the migrants who desire to go out there from Great Britain. That, in essence, indeed is the problem of inter-Empire trade.

Legislation.

Now I could speak to you at length on many other ways in which New Zealand has come to the fore, especially in regard to legislation. There is, for instance, the State aid which she gives to those who wish to settle upon her land. At present, she advances 75 per cent of the value of the land on first mortgage to those who wish to take up property, and whose applications are approved. Similarly, workers—those

who are not earning over a certain amount in wages per annum—can receive from the State advances up to 95 per cent of the value of the land and the house they wish to build upon it. These enterprises have proved very successful in assisting the settlement of the country. Then, again, we have a Public Trust Office, the first of its kind, I believe, to be established in the British Empire, dating back to the seventies of last century; we have also a State life and fire insurance, designed in the first place to keep down the rates of insurance. These institutions have thrived, but they have not interfered in any way with other concerns of a like nature, a number of which also are returning good dividends in New Zealand. The Dominion was the first in the Empire, I believe, to institute the principle of compulsory arbitration in labour disputes, and has continued improving her legislation in this direction from its earliest inception. This has not eliminated strikes, but the benefit of the legislation has been obvious. We were the first in the Empire also to give manhood suffrage to Britishers at the age of 21 years. We were the first to give the vote to women, and, though this has been in vogue since 1893, no woman has yet been returned to Parliament. New Zealand was first in the field with old-age pensions, which became law in 1898. There is also the National Provident Fund, which had its genesis in 1910, and a National Endowment Fund. New Zealand is particularly proud of her educational system, which is free, compulsory, and secular. Education for the primary schools is free, admission to the secondary schools is by proficiency, and to the universities by easy scholarships. The ideal before the people is that every child, even of the humblest or most neglectful parents, shall have a fair chance in life. Medical examination at the primary schools is free, and, if the parent desires to accept the advice of the doctor and

cannot afford it, there are means by which the child can receive free medical attention also. There is also free dental treatment, and nurses trained at clinics in the cities are sent out in pursuance of this work into the outlying districts. Backward children and those not mentally keen can receive special care and attention to bring them along. The State also fosters knowledge of the duties of motherhood, and there are special institutions provided for the attention of young mothers, and for spreading information regarding the treatment of children in their infancy. And so I could go on.

Scenery, Etc.

In conclusion, just one word about the Dominion itself. It is one of the most beautiful countries in the world from a scenic point of view. Indeed, it has been described as an epitome of all the other great scenic countries of the world. Her mountains are the equal of those in Switzerland; her fiords as beautiful and grand as those of Norway; her lakes larger, and as impressive in their mountain settings, as those of Italy. We have great rivers, rolling downs like those of your own country, and immense tracts of virgin bush. Deer roam in the forests in great numbers; the streams and lakes are well stocked with trout, which are obtained up to 25 lb. in weight, and salmon are now making their way into our rivers. In the coastal waters of the north, huge swordfish provide great sport for anglers from yachts. The climate is delightful, although, of course, we have our wet days and our winds; but there are no extremes of heat and cold, and there is a great deal of sunshine. Cattle feed in the pastures all the year round, without any necessity for stabling. The splendid health of the people is shown in the fact that we have the lowest death rate in the world. The Dominion has developed her tourist

resorts and her sports, and already is noted the world over for her attractions.

THE FUTURE.

So far as the future is concerned: we have our ideals; we hope to bring our country along until it is in fact, what we now call it—"The Britain of the South." The people have ingrained in them British traditions, and great loyalty to the British Throne. Our population to-day is 99 per cent British. We have around us a number of small Dependencies, and the administration of these islands has been praised by Britain herself. I could tell you much more about the country, but time will not permit.

(*Lecturer:* H. T. B. DREW.)

(By permission of Sir James Parr, High Commissioner for New Zealand.)

THE ECONOMIC POSITION OF INDIA: I

PRELIMINARY SURVEY.

Before we proceed to examine modern trade tendencies in India, let me first explain in a very few words the objective of this lecture and my general plan of campaign.

The world has grown small nowadays, and is growing year by year perceptibly smaller. What was once a vast globe, dotted with independent empires or city states, has now contracted, under the influence of steam and electricity, the aeroplane and wireless, until Europe and Australia, America, Africa and Asia, the north and south, east and west, rub intimate shoulders and slowly realize their close interdependence. Last century, civilized man discovered that no individual can live by or to himself alone. This century, it is the turn of the State to learn the same painful yet inspiring lesson.

Thus no single nation, organized as a modern State, can possibly be content to stand alone. It can only attain its highest development and its fullest self-expression in relation to developments, however dissimilar, in other parts of the world.

These are facts which speak for themselves. They are true of art, science, and religion; they are also and perhaps most convincingly true in their application to industrial and commercial expansion. Now let us apply them to the problem before us. If I am to give you a correct and clear account of modern trade developments in India, I can best do so by showing, first, how India stands commercially by comparison

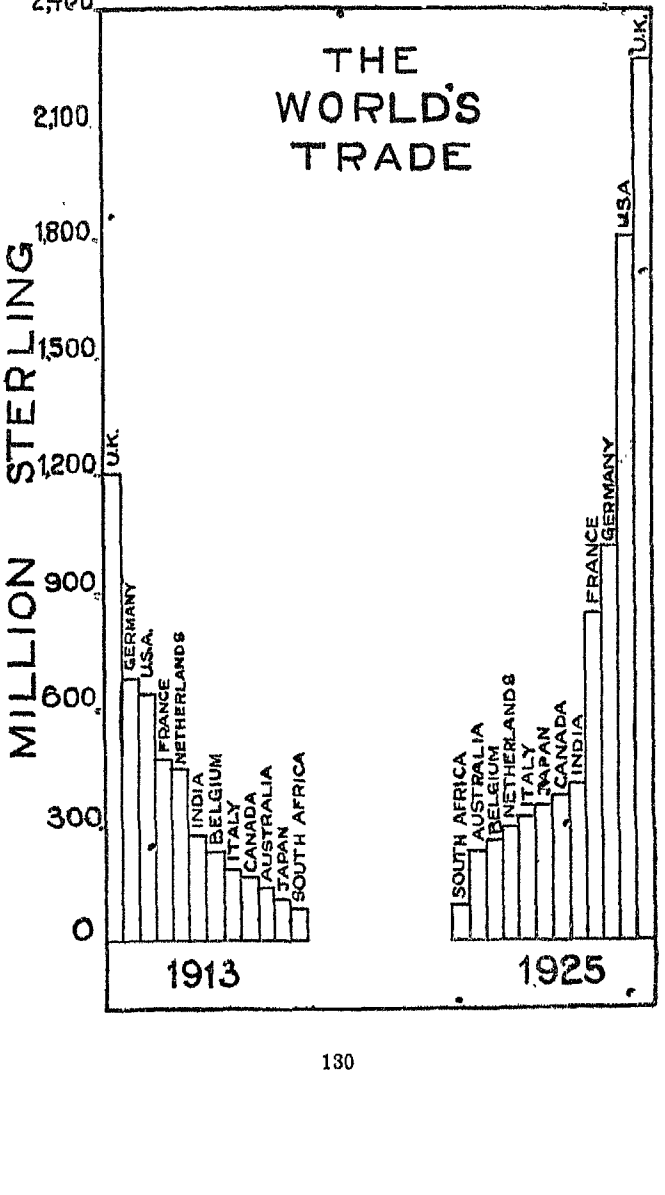
with other countries—her place, so to speak, in the commercial sun—and how her trade has developed relatively to general world tendencies.

So our plan of campaign will be something like this. We shall begin by using a sort of mental telescope and try to estimate India's commercial progress relatively to that of other countries. We shall then shorten the range, take our field-glasses, and trace India's trade relations with individual foreign countries. A further shortening—it is a case of opera glasses now—and we shall see her place in Empire trade and especially her trade relations with the United Kingdom. Finally, with the naked eye of the imagination, assisted by lantern slides, I want to take you with me to India, to trace there local actions and reactions to world movements of trade.

One word of warning before we start. What you and I are jointly interested in are tendencies—trade tendencies—and it will be my aim to explain such tendencies as clearly as I can. The best method of doing so is by means of quite simple diagrams, and that is the method I propose to adopt, supplemented by slides illustrating commercial life in India. The diagrams are based on statistics, but do not be alarmed. We are trying to visualize tendencies and we do not either wish or need to cumber our minds with statistics. I shall have to quote one or two figures, but they shall be as few as possible. I don't want you to try and remember them, but merely to try to grasp the general principles they illustrate.

The World's Trade.

Diagram 1 compares the total trade, import and export combined, of each of the twelve principal countries of the world in 1913 and again in 1925. The values are given throughout in sterling, and the blocks have been drawn to scale.


THE WORLD'S TRADE
MILLION STERLING
2,400
2,100
1800
1,500
1,200
900
600
300
0
U.K.
GERMANY
U.S.A.
FRANCE
NETHERLANDS
INDIA
BELGIUM
ITALY
CANADA
AUSTRALIA
JAPAN
SOUTH AFRICA
1913
SOUTH AFRICA
AUSTRALIA
BELGIUM
NETHERLANDS
ITALY
JAPAN
CANADA
INDIA
FRANCE
GERMANY
U.S.A.
U.K.
1925

The Big Three trading countries of the world were, in 1913, the U.K., Germany, and the U.S.A., with France running a poor fourth. In 1925, France has attained to third place, and the Big Three are now the U.K., the U.S.A., and France, with Germany a near fourth. India was sixth in 1913, and stands fifth in 1925. The biggest jump has been made by Japan, from eleventh place to seventh. Canada, Australia, and South Africa were respectively ninth, tenth, and twelfth in 1913, and are now sixth, eleventh, and twelfth. The continental countries have, on the whole, lost ground, in spite of the so-called advantage of a depreciated exchange. It is not usually realized that India holds so important a place as fifth in the order of precedence of the world's trade.

DIRECTION OF INDIA'S TRADE.

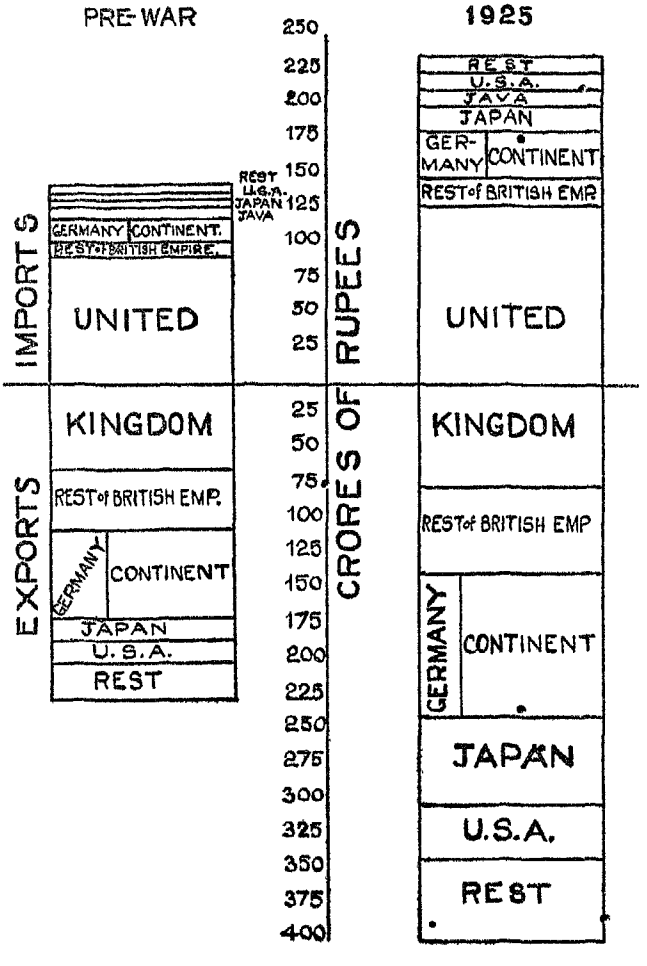
Diagram 2 shows how India's trade is distributed and shows also variations in that distribution pre-war and again in 1925. Note, firstly, how India's exports have developed since pre-war days more rapidly than her imports. I shall have more to say on this subject later.

The United Kingdom before the war supplied India with more than 60 per cent of her imports. She still sells to India more than half of India's annual requirements of oversea goods. Note, however, the rapid expansion of Japan and the U.S.A. The trade of the Continent with India has also expanded, but not so much as that of Japan and the U.S.A. India is a large importer of sugar from Java, and thus Java also claims a substantial share of Indian imports.

Now turn to the exports from India, and you will see the cause of these developments. Japan and America are selling more goods to India. Why? For the very good reason that they are buying more Indian goods, and thus furnishing the credits against which India can, in her turn, buy their goods.

.2.

DIRECTION OF INDIA'S TRADE



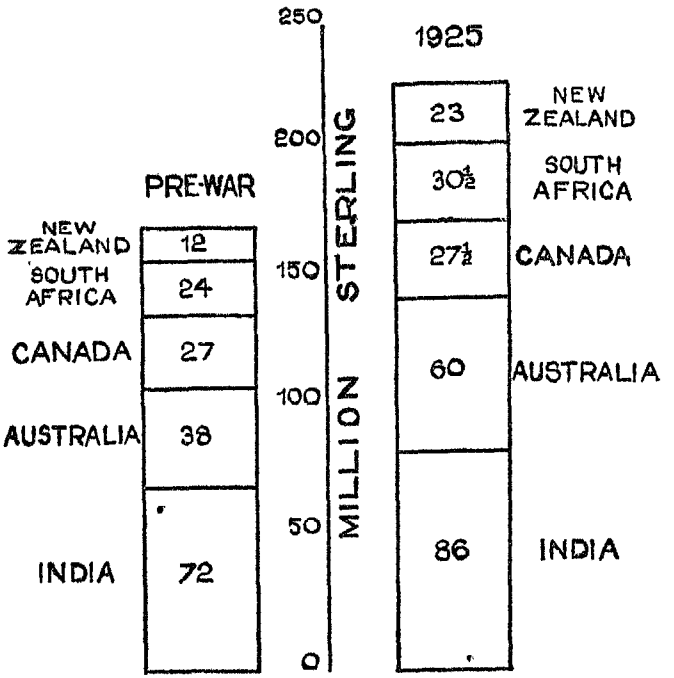
The United Kingdom purchases of Indian goods have also expanded, though not to quite the same extent. But England still remains the best oversea market for Indian exports. Do not forget that the purchase of Indian goods establishes credits against which India will, in her turn, buy British manufactures.

EXPORTS FROM THE UNITED KINGDOM TO THE DOMINIONS AND INDIA.

Diagram 3 compares the exports of the United Kingdom to the Dominions and India pre-war and again in 1925. It shows the large and increasing importance of India as a market for British goods. If you compare the Indian market with the markets of New Zealand, South Africa, Canada, and Australia, you will see how much larger are the purchases of British goods by India than by any one of the other four Dominions. Purchases by India increased from £72,000,000 in 1913 to £86,000,000 in 1925. The market of next importance is that of Australia, which increased its purchases of British goods very largely, from £38,000,000 in 1913 to £60,000,000 in 1925, but still buys less from the United Kingdom in 1925 than India did ten years ago.

But India is not only the best market for British goods within the Empire. She buys every year from the United Kingdom more goods than any other single country, whether within or without the Empire. She is, and has for many years been, your best customer. And one last point, India is also your best customer in this further sense, that the goods which she buys from you consist chiefly of finished commodities carried to the highest stage of manufacture—not merely raw materials or half-finished goods. Her yearly purchases thus help to a very large extent to maintain British labour in employment.

EXPORTS FROM THE UNITED KINGDOM TO THE DOMINIONS AND INDIA



SIXTY YEARS OF INDIAN TRADE.

Diagram 4 illustrates the expansion of Indian trade during the last sixty years, 1865 to 1925. For the sake of simplicity, I have shown not the separate values of each single year, but the average annual value of each five years of trade. The upper curve indicates the value of exports of merchandise from India and the lower curve the value of imports of merchandise into India. You will notice that the exports have always exceeded the imports in value. The margin between the two lines represents the balance of trade favourable to India; that is to say, the aggregate of sums held to India's credit abroad, on the strength of her surplus of exports over imports, and utilized to pay interest at the source on foreign capital invested in India and to liquidate other foreign claims.

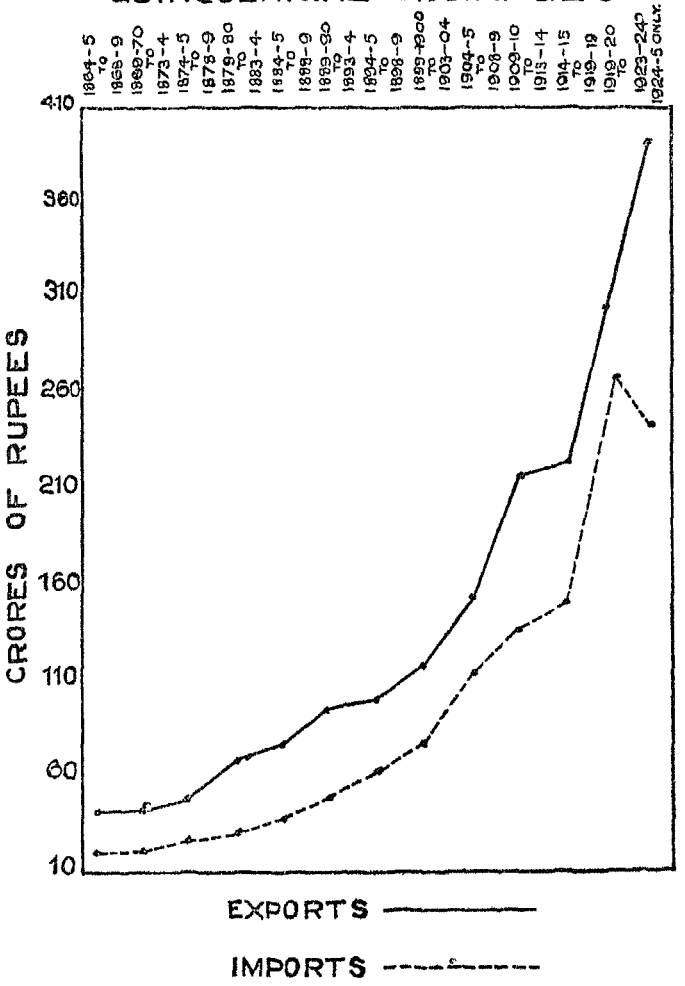
If you examine the two curves, you will at once be struck by the fact that the general upward tendency, representing expansion of trade, is gradual during the first half of the period and more rapid during the second half, culminating in a very steep rise indeed, the average of the five years which have succeeded the war. You will also notice that at two places the curve flattens out, representing two temporary checks to the upward movement. The first of these checks covers the last five years of the nineteenth century and the second represents the five years of war, 1914 to 1918.

The explanation of these tendencies is comparatively simple. At the beginning of the period, world conditions were generally favourable to Indian trade. The Suez Canal was in course of construction and was actually opened in 1869. From the first its success was assured. It quickened and cheapened the marketing of Indian goods in Europe and of European goods

4.

SIXTY YEARS OF INDIAN TRADE

QUINQUENNIAL AVERAGES



in India. In fact, modern trade with India may be said to date from the opening of the Canal. With the development and improvement of ocean transport, posts and telegraphs, Indian goods became better known and the demand for them increased. Capital was invested in India, and roads, railways, and canals increased. Cotton and jute mills were erected and agriculture extended and improved.

Unfortunately, while general conditions were favourable to India's trade during the last quarter of last century, one condition was adverse, and it was a condition of vital importance. With the fall in the world price of silver which occurred during the last half of the nineteenth century, the value of the rupee also diminished. From 2s. it fell in the seventies to 1s. 9d., in the eighties to 1s. 4d., and in the middle of the nineties it reached its lowest point of approximately 1s. The uncertainty of exchange proved a serious handicap, and accounts for the slow development of trade between 1874 and 1900. The lowest point of depression was reached during the five years 1895 to 1900. Although these five years witnessed the gradual recovery of exchange from 1s. to 1s. 4d., they also saw India devastated by serious outbreaks of famine and plague, which retarded her industrial and commercial expansion.

With the turn of the century we enter on an entirely new phase. Exchange is now stabilized at 1s. 4d.; education, transport, and communications have improved, and with them the ability to combat famine and plague. By a curious coincidence the year 1900 witnessed a simultaneous advance in three different directions. Firstly, with a stabilized rupee the foundations of commercial and industrial expansion are laid. Secondly, Indian railways pay their own way for the first time. Thirdly, and also for the first time, India's imports of gold definitely exceed her imports of silver

in net rupee values. We shall return to this point in later diagram.

The expansion of trade which took place during the first fifteen years of the century is shown in the upward tendency of both curves at this point. During the years 1905–10 in particular, the mileage of Indian railways was greatly increased; cultivation was actively extended; new cotton mills, with 1,000,000 additional spindles were erected, and new jute mills containing 250,000 spindles; the output of coal and mineral oils increased. Hence the rapid expansion of trade, which was checked by the outbreak of war but gathered new strength during the boom which followed the conclusion of peace. In 1913 India's total trade was just double what it had been in 1901.

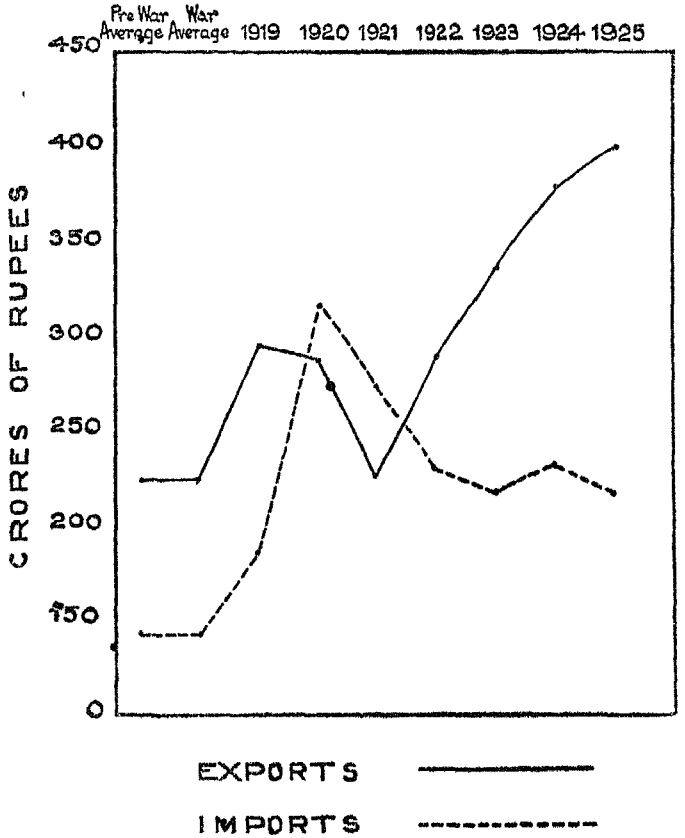
The last sixteen years, from 1909 to 1924, are worthy of separate study, and will be shown in the next diagram—Diagram 5.

SIXTEEN YEARS OF INDIAN TRADE.

I have found it convenient to take the annual average value of exports and imports during the five years immediately preceding the war, 1909–1913, for comparison with the average of five years of war, 1914–1918, and with each of the subsequent years, 1919–1925. As we saw in the last diagram, the average of imports and exports on private account during the war was practically the same as during the five preceding years. This was due partly to the scarcity of tonnage and partly to the cessation of trade relations with the important markets of Germany and Austria. The year 1919, which saw the beginning of the post-war boom, saw, in consequence, a stimulus given to India's exports in excess of that given to her imoprts. This is shown in the steeper rise of the export over the import curve in that year. Naturally, a shortage of, and increased demand for, manufactured

.5.

SIXTEEN YEARS
OF
INDIAN TRADE



goods during a boom is immediately reflected in a keen demand for the raw materials from which such goods are made.

In the middle of 1920, the slump began, and this is indicated in the fall of the export curve from 1919 to 1920. But the enormous credits secured by India in foreign countries against heavy exports during 1919 and the first half of 1920, enabled her to purchase large quantities of goods abroad. These orders naturally took time to execute, for even after the slump had set in manufacturers found their books full of orders for delivery when possible. Hence the record imports of 1920 and the excess of imports over exports during both 1920 and 1921. It is an interesting fact that the total value of exports in 1919 and 1920 combined is almost exactly equal to the total value of imports in 1920 and 1921.

The full effect of the slump, with its resulting fall of prices, is strikingly illustrated in the steady decline in the value of imports, which took place between 1920 and 1921, between 1921 and 1922, and again, more gradually, between 1922 and 1923. The first indication of a gradual recovery in India's import trade is seen in 1924. The decline of 1925 is due to the general decline of world prices rather than to any falling-off in the volume of the trade.

The strength of India's trade position as a producer of goods which are essential to the rest of the world, if existing standards of life are to be maintained, is illustrated in the rapid recovery of her export trade during 1922, 1923, 1924, and 1925. The decline in exports which occurred during 1921 indicated the gradual liquidation of foreign stocks of Indian goods. In the conditions of trade which obtained during the four succeeding years, 1922, 1923, 1924, and 1925, stocks were nowhere built up, for price levels have not even yet been stabilized. Foreign purchases from

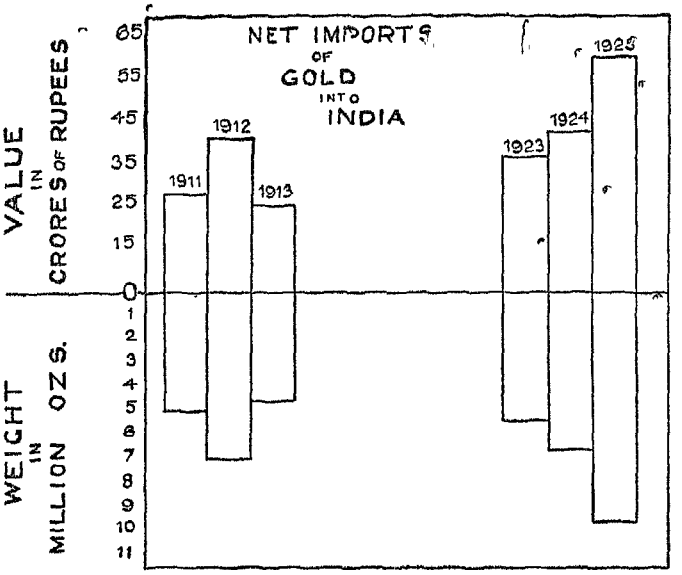
India during these three years represent purchases for immediate consumption and indicate the extent to which Europe, America, Africa, and Australia depend on India for their most vital requirements. A trade boom now would mean a colossal demand for Indian goods, far in excess of the level reached in 1919–20, which has indeed already been exceeded in 1923, 1924, and 1925.

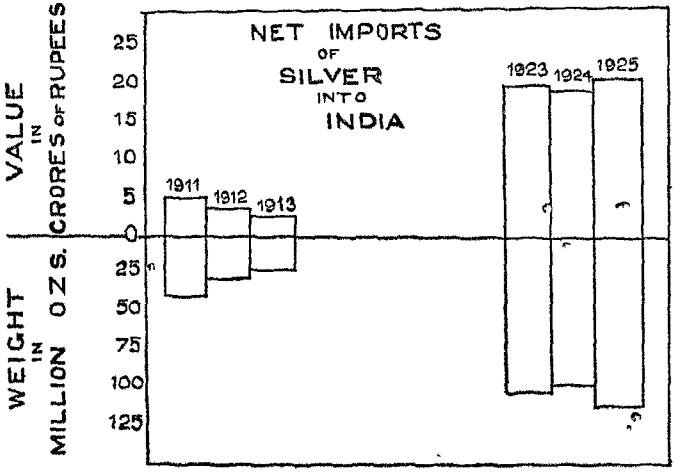
INDIA'S DEMAND FOR BULLION.

Diagram 6 compares the imports of gold and silver into India during the past three years, 1923, 1924, and 1925, with imports during the three pre-war years, 1911, 1912, and 1913.

Since the middle of 1924, India has imported gold in large quantities. Indeed, her imports of gold in 1925 to the value of £47,000,000, or more than the total output of the South African mines, constitute a record. The explanation lies in the fact that the appreciation of sterling in terms of the dollar, and the appreciation of the rupee in terms of sterling, have resulted in a drop in the rupee price of gold. In fact, gold is selling in India at the present moment at a price which is lower than the pre-war price—probably the only commodity which is cheaper than it was pre-war. In the past, India has often made a handsome profit on her transactions in gold and silver, buying either commodity, and particularly gold, when the price was low, and selling when the price was high.

If we turn to the diagram showing net imports of silver, we find that India's purchases of silver during the past three years have advanced even more than gold beyond the pre-war imports. There has, in fact, been a good deal of exaggeration in regard to India's gold imports. The 1925 imports were, it is true, a record. But the 1926 imports are very much reduced


NET IMPORTS
OF
GOLD
INTO
INDIA
VALUE
IN
CRORES OF RUPEES
WEIGHT
IN
MILLION OZS.
65
55
45
35
25
15
0
1
2
3
4
5
6
7
8
9
10
11
1911
1912
1913
1923
1924
1925


NET IMPORTS
OF
SILVER
INTO
INDIA
VALUE
IN
CRORES OF RUPEES
WEIGHT
IN
MILLION OZS.
25
20
15
10
5
0
25
50
75
100
125
1911
1912
1913
1923
1924
1925

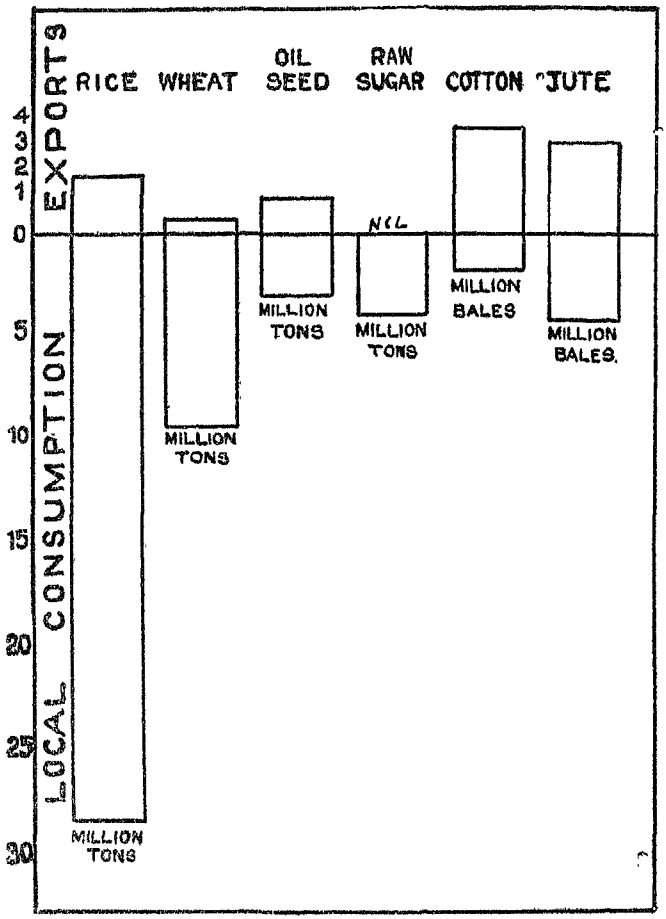
—less than those of 1913, even allowing for the enhanced sterling value of the rupee. On the other hand, India has, during 1926, spent on silver imports three times what she spent in 1913.

Local Consumption and Exports of Agricultural Produce.

There is one important aspect of Indian trade which is frequently overlooked, and to which attention is invited at this point. India, like America, but unlike the United Kingdom, is more closely interested in internal than in external trade. Local resources are so vast and local demands, if widespread, are, in the aggregate, so enormous, that the oversea trade of India occupies her attention very little in comparison with the equation of internal demands and supplies. This fact is not always realized, and yet it is vital to a proper understanding of Indian trade, taken as a whole. Exports of 3,000,000 bales of cotton, 3,000,000 bales of jute, 3,000,000 tons of rice, and 1,000,000 tons of wheat or oil seeds constitute figures so large that we are apt to overlook the fact that they represent merely the exportable surplus—quite a moderate proportion of India's total production.

Diagram 7 compares the quantities of rice, wheat, oil seeds, raw sugar, cotton, and jute consumed in India, with the exports of each of these crops. All the blocks below the zero line represent consumption in India, while those above the zero line represent exports. You will notice that, particularly in the case of rice, wheat, and oil seeds, the exports account for only a small part of the total production, the balance being consumed in the country, while in the case of raw sugar there is no export at all. With regard to cotton, although India exports more cotton than she consumes locally, she exports grades of cotton which are not required by her own mills and fills up

LOCAL CONSUMPTION AND EXPORT INDIAN STAPLE PRODUCTS 1925



the gap by importing grades which she requires from East Africa, America, and other countries. With regard to jute, before the war India consumed more than she exported, but that position is now reversed.

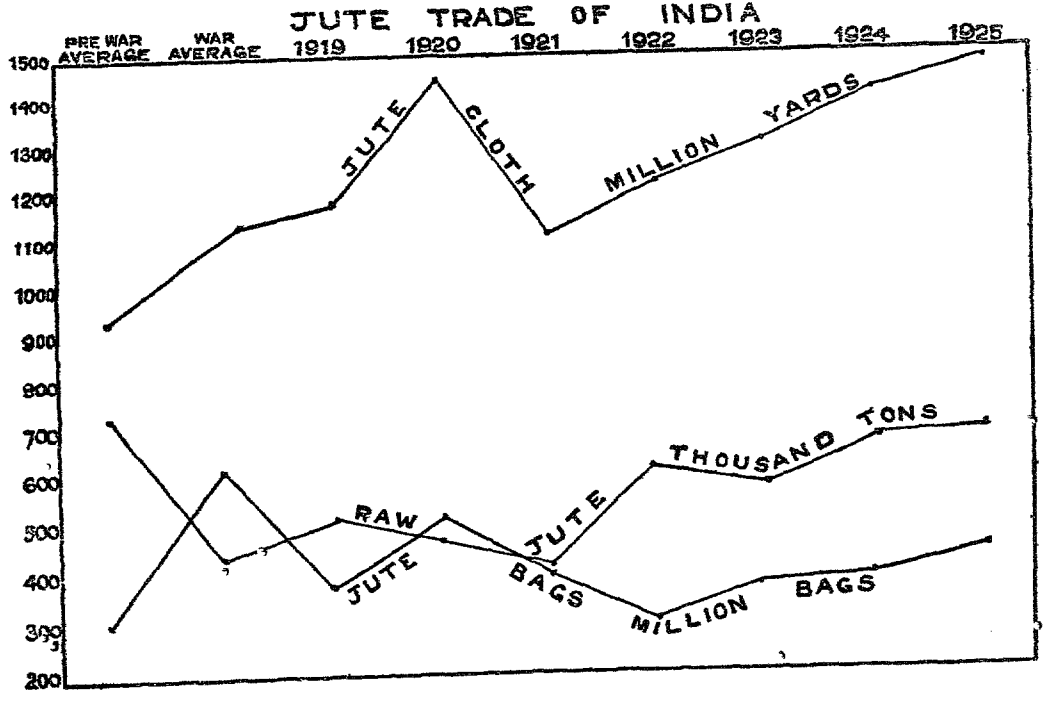
The diagram only shows commodities for which statistics are available. The conclusion I have drawn, namely, that India is much more interested in her internal trade than in her foreign trade, would be still more obvious if we had figures to represent the local consumption of millets, pulses, spices, tobacco, and other commodities. If India's total agricultural produce is taken into account, calculations show that for every acre of land producing goods, whether grain, oil seeds, fibres, tea, etc., for export, eleven acres are cultivated for local consumption.

The fact is that the exportable surplus of Indian produce is a true surplus—that is to say, a margin which India can relinquish during periods of good harvests, and a reserve on which she can draw for her own local requirements in times of scarcity.

Jute Trade of India.

I now turn to examine in detail the position of the Indian jute trade. Jute is a comparatively cheap fibre, grown only in India; it is woven into jute cloth, from which jute bags and sacking are manufactured. Jute sacks are in great demand all over the world for the convenient handling of grain and other commodities. The lighter types of bags are known as hessians and are used for the transport and storage of light grains and other goods easily handled. The heavier types are known as sacking, and are used to carry heavy commodities such as coal.

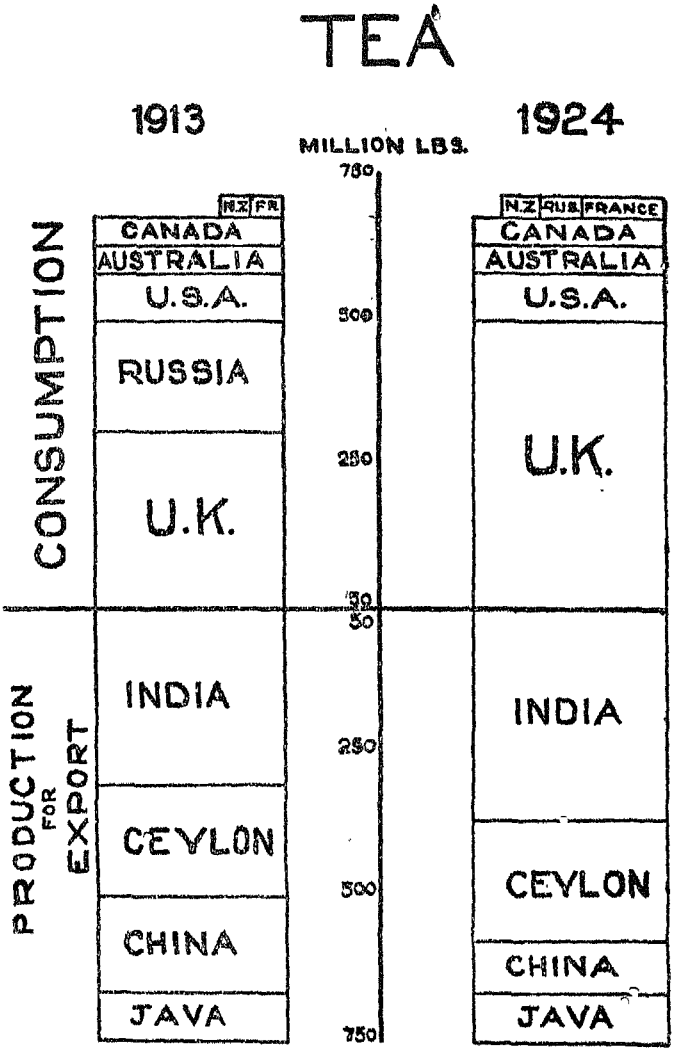
Jute is exported from India in the raw state to be spun and woven abroad (as for example in Dundee); or else as cloth, to be cut into lengths and sewn into bags abroad; or else as fully finished


JUTE TRADE OF INDIA
PRE WAR AVERAGE
WAR AVERAGE
1919
1920
1921
1922
1923
1924
1925
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
JUTE CLOTH MILLION YARDS
RAW JUTE BAGS MILLION
JUTE THOUSAND TONS
BAGS

bags or sacks. Diagram 8 shows variations in the export of jute in all three stages during the pre-war period, the war period, and during each of the six succeeding years. It is difficult to obtain an exact comparison, for the units of measurement naturally vary in each case. The top curve represents millions of yards of jute cloth exported, chiefly to the United States of America. The bottom curve represents millions of jute bags exported, chiefly to England, South America, Africa, and Australia. The middle curve represents, in thousands of tons, the exports of raw jute, chiefly to Dundee and the Continent.

The first point to which attention is drawn is the effect of the war on this trade. Although jute mills have been erected in many parts of the world, the Indian mills are in a commanding position in that they operate in Bengal, close to the only source of supply of the raw material. One effect of the war was to encourage the export of manufactured jute goods from India, in preference to raw jute, which was bulkier and more expensive to transport at a time when ocean freight charges were high. In short, the high cost of ocean freights during the war operated as a protection to the Calcutta jute mills. The result may be seen in the drop which took place during the war in the export of raw jute and the rise in the export of jute cloth and jute bags. In 1918 there was a slight recovery in exports of raw jute, but a falling-off in exports of bags owing to the existence of war stocks awaiting disposal. The boom of 1920 stimulated the exports of manufactured jute but not of raw jute, and the whole trade suffered to some extent from the slump of 1921. The exports of cloth recovered in 1922, and advanced still further in 1923, 1924, and 1925. The exports of raw jute decreased during 1923 and increased during 1924, but are still well below the pre-war level.

TEA


1913
1924
MILLION LBS.
780
500
250
50
50
250
500
750
CONSUMPTION
PRODUCTION FOR EXPORT
N.Z
FR
CANADA
AUSTRALIA
U.S.A.
RUSSIA
U.K.
INDIA
CEYLON
CHINA
JAVA
N.Z
RUS
FRANCE
CANADA
AUSTRALIA
U.S.A.
U.K.
INDIA
CEYLON
CHINA
JAVA

TEA.

Diagram 9 compares the production and consumption of tea in the world's chief producing and consuming centres, pre-war and now. Owing to the disturbed condition of China, the exports of tea from China are much curtailed. Indian production has increased and so has that of Java, while the production of tea in Ceylon is about stationary. I should add, however, that Ceylon's production showed considerable expansion in 1926.

The principal consuming countries are, besides this country, the United States of America, Australia, Canada, New Zealand, and France. Russia used to consume large quantities of tea, but her demand has fallen off, and although it now shows signs of recovery, it is still far below its pre-war strength. All the countries shown in this diagram as the principal consumers of tea have increased their demands. It is interesting to note also that the general taste for tea is developing in the direction of the finer qualities. Common teas are at a discount, and the margin between the prices of the better teas and those of coarser grade is wider than it used to be.

(*Lecturer:* H. A. F. LINDSAY.)

THE ECONOMIC POSITION OF INDIA: II

The Recovery from War and Post-war Conditions.

At Geneva last month, at a meeting convened by the League of Nations, the delegates of various countries met to discuss the economic effects of the war and the outstanding problems which still await a solution. It was, as you can well imagine, a vast field which had to be considered. Each country has its own peculiar problems. It often helps to look at things from another person's point of view and to compare their experiences with your own. You look at things from a new and broader angle, with a quickened sympathy and a livelier imagination.

Before I attempt to give you a short outline of India's economic difficulties and how she is facing them, I should like first to draw your attention to a few of the outstanding features of the world's trade as it is carried on to-day. The wounds dealt during the war are still apparent in our everyday economic life. These wounds are slowly healing. We want, if possible, to accelerate the process of recovery. How best can that be done ?

That was the problem which was recently discussed at Geneva. From those discussions one cardinal fact emerged. The body industrial is, on the whole, not unlike the body physical. It is a complicated system of organs and nerves, of tissues and arteries. The physician must first diagnose the wound, then ascertain the remedy, and finally apply it. But the main point is that the physician can count on success only to the extent to which he can be certain that he is

really and truly co-operating with Nature. It is Nature that heals the wound. All that the physician can do is to assist Nature, removing obstacles to Nature's work, and thus stimulating the great natural tendencies which make for health.

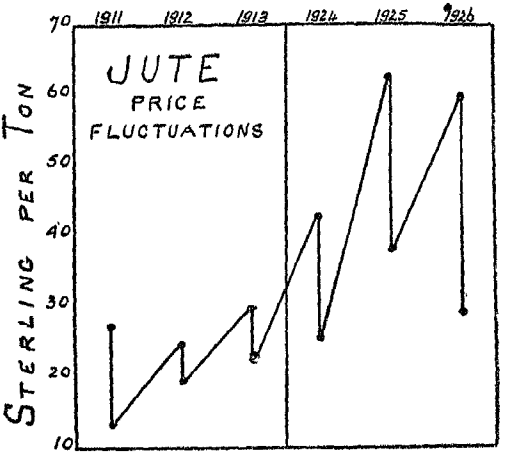
So also in the great system of trade and industry. It is not enough to diagnose the wounds. From the moment those wounds have occurred, the natural economic laws begin to exert their influence towards recovery. It is therefore our first duty to ascertain what natural developments have taken place, and in what directions can they be assisted in their beneficial action.

Now the first most obvious and most deep-seated cause of the economic ills from which we are suffering to-day is admitted on all sides to be lack of confidence. The primary producer is uncertain of the market for his goods. The manufacturer is uncertain as to the prices he must pay for his raw materials and the prices he will get for his finished goods. The merchant is uncertain of the charges he must allow for in calculating transport, exchange, and interest costs. Labour is uncertain of employment and too often also uncertain of wages and hours of work. The shipowner cannot count on cargoes or the banker on a safe return of his capital. At all points lack of confidence prevails and hampers legitimate trade.

To what is this lack of confidence due? To a great many individual factors—often small in themselves, but of considerable effect in the aggregate. In general, however, one may say that fluctuations of price is the root cause. High taxation is one cause, but it is really the fear of still higher taxation that causes most apprehension. Uncertainties of taxation, of exchange, of transport, insurance, and interest charges, all have their effect, and their worst effect consists in enhanced fluctuations of price.

Now let me at this point show you by means of diagrams one or two instances, drawn from India's trade statistics, of the way prices fluctuate nowadays as compared with pre-war.

My first diagram shows the normal fluctuations in the price of jute which occurred pre-war, as contrasted with the abnormal fluctuations which occur now. To illustrate my point, I have taken the maximum and

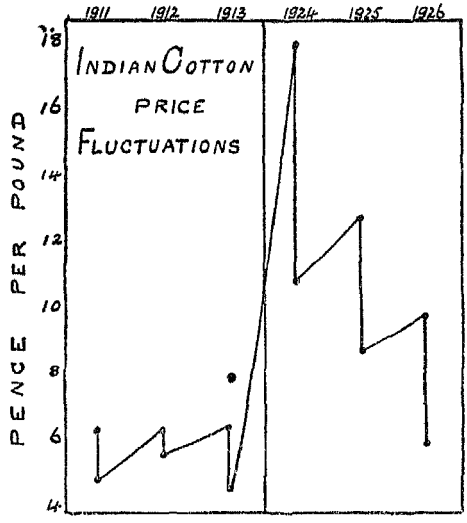


minimum quotations for first marks during each of the years 1911, 1912, and 1913, and have set them side by side with the maximum and minimum quotations for the same grade of jute, namely, first marks, during each of the years 1924, 1925, and 1926.

You will see at once how very wide have been the fluctuations of recent years, and you can well imagine what serious results have ensued, on the one hand to the cultivator, who was always uncertain at the time of sowing what price he would get for his crop; and again to the manufacturer, who did not know what price to pay for forward deliveries; and again

to the merchant, whether dealing in the raw material or in the finished goods.

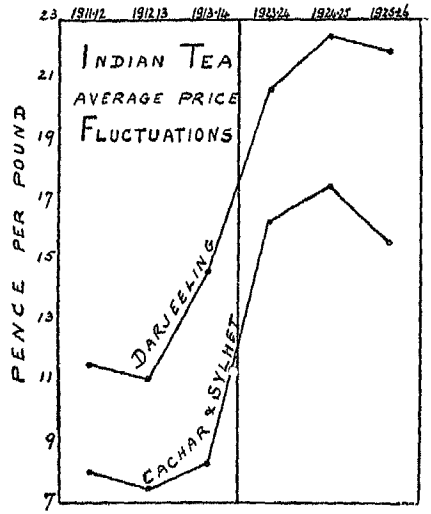
But these are not special characteristics of the jute market. They occur in one after another of the markets handling India's staple commodities. Take cotton, for example. The following diagram shows fluctuations in the price of Indian cotton at Liverpool



pre-war, and has been prepared on exactly the same lines as that for jute, namely, the maxima and minima quotations for each of the years 1911, 1912, and 1913, and again for 1924, 1925, and 1926.

Here, again, you can see how much wider are the fluctuations of price during recent years, as compared with pre-war. The cotton prices are of course of special importance to India, for they affect India's markets in two ways—in the prices which the cultivator gets for his cotton crop and again in the prices which he has to pay for the cotton clothing which he wears.

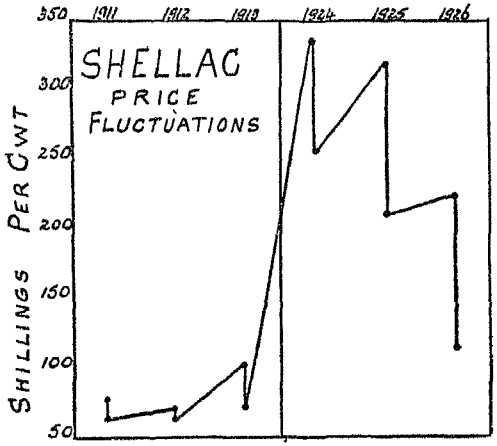
You will see how great has been the decline in the price of raw cotton during the past three years. Indian prices have naturally followed American prices, since the American crop is the biggest in the world and amounts to more than double the Indian crop in volume. Indeed, this year the American crop is a record, at 18,000,000 bales, or more than three times



the size of the Indian crop. The result has been a sympathetic drop in the price of Indian cotton, from 18d., the maximum of 1924, to 6d. to-day. The effects of these fluctuations on India's cotton textile market will be illustrated in a later diagram.

My next illustration is taken from the tea market. Here also you observe that the post-war fluctuations of price are considerable. In this particular case I have shown the prices of two different grades of tea, in order to illustrate a further tendency which is the result of post-war conditions, namely, the spread

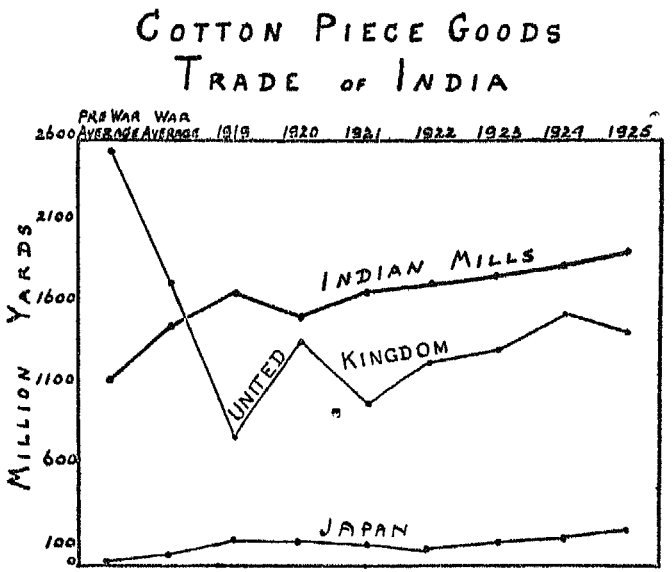
which has occurred between the prices of higher and lower grades of the same commodity. In pre-war days the margins between better and inferior grades, say of tea, or hemp, or jute, or hides and skins, were comparatively narrow. To-day the better quality has appreciated relatively to the worse, and you can see this tendency in the diagram before you. Darjeeling teas are fetching better prices than Cachars and Sylhets by a margin greater than pre-war.



One more diagram completes the series which compares the fluctuations in the prices of India's staple commodities pre-war and now. The illustration is taken this time from the shellac market. Here, again, you see how much wider have been the fluctuations in the price of this commodity also, as compared with pre-war.

Now let us see what has been the practical effect of cotton price fluctuations on the Indian market for cotton piece-goods. There exists side by side in India a demand for heavy piece goods woven by the Indian

mills from short staple Indian cotton, and also for the finer and lighter cloth woven largely by the United Kingdom from long staple American and Egyptian cotton. Both lines of trade are indicated in the diagram before us. The three curves indicate imports of Manchester piece goods into India; the production



of the Indian mills; and the imports into India of Japanese piece goods. Japan is, after the United Kingdom, the next biggest exporter of cotton piece goods to India. The quantities compared are millions of yards of cloth and the periods are pre-war, war, and each of the succeeding years, 1919–25.

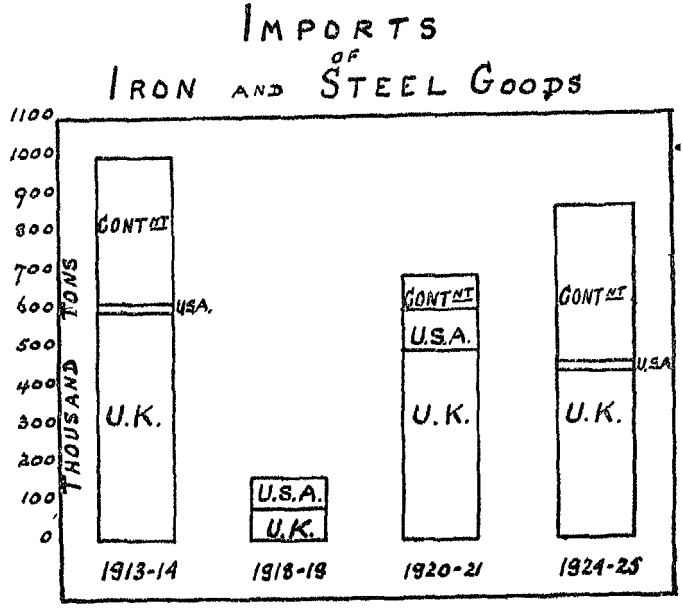
As you will see from the diagram, the effect of war conditions was a serious falling-off in the shipment of Manchester goods to India. This is illustrated by the fall in the curve, which reaches its lowest point in

1919. Conversely, the Indian mills benefited during the war, as you can see, from the upward tendency of the curve.

In 1920, stocks of Manchester goods in India were low, while stocks of Indian mill-made goods were high, with the result that imports of the former increased during the boom year, and Indian production diminishes. The two curves which thus converge in 1920, diverge in 1921, when the Manchester trade was hampered by high prices, accentuated by the serious fall in exchange which occurred during 1920–21. India, Manchester, and Japan, have all three gained by the comparative stability of exchange and the more normal conditions of Indian trade during 1923–25. The point to notice, however, is that, owing to the high price of cotton (and, therefore, of piece-goods), consumption has not increased in India since the war. Demand has tended to concentrate, not on the finer classes of goods which were formerly so popular, but on the coarser goods which were relatively cheap. India is to-day consuming almost the same yardage of mill-woven cloth that she consumed before the war, namely, 3,600,000,000 yards. But whereas before the war she produced 1,000,000,000 yards for local use and imported 2,600,000,000 yards, nowadays she produces 2,000,000,000 yards for local use and imports 1,600,000,000. With the recent fall in the price of cotton, however, there is evidence that the demand for cotton piece goods in India is stronger than at any time since the slump of 1921.

The next diagram illustrates the trade in iron and steel goods to India in 1913–14, the year just before the outbreak of war; in 1918–19, the last year of war conditions; in 1920–21, the boom year; and again in 1924–25. The quantities shown are in 1,000 tons. The trade is shared principally by the U.K., U.S.A., and the Continent. The effect of the war on this trade

was colossal. Note the shrinkage from over 1,000,000 tons in 1913–14 to less than 200,000 tons in 1918–19. Note, however, also, that America's share, which was small in 1913–14, increased by more than double in 1918–19.

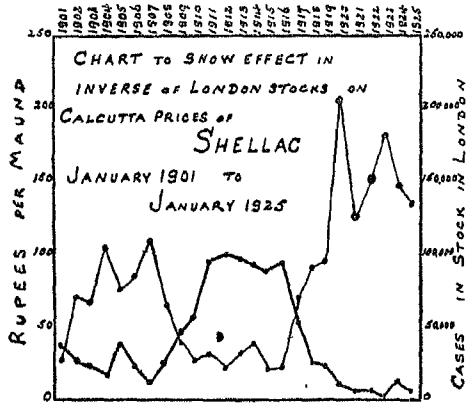


The boom of 1920–21 had a curious result. Imports during the year were so highly priced in comparison with pre-war price levels, that while in quantity they were less than three-quarters of the imports of 1913–14, they were just about double the value. It will be noted that the United Kingdom secured most of the trade in 1920–21, while the shares of the Continent and America remained comparatively small.

The effects of low manufacturing costs on the Continent are striking in 1924–25, when the share of the

United Kingdom is reduced, that of the Continent increased, and the U.S.A. is almost squeezed out altogether.

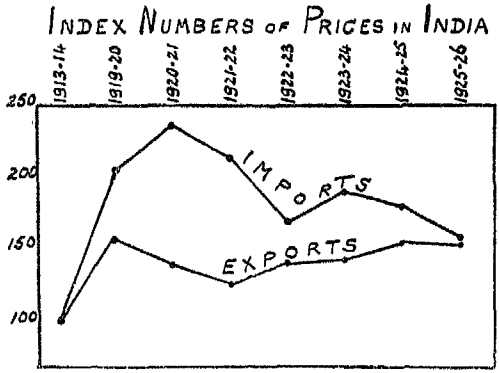
Thus, during the last year or two, the British share of this trade, taken as a whole, has been well maintained. In 1913–14, 69·9 per cent of India's imports of iron and steel goods came from the United Kingdom, Germany contributed 14·5 per cent, and Belgium 11·5 per cent. In 1925–26 the United Kingdom



supplied 67·7 per cent of this trade, Germany 6·4 per cent, and Belgium 15·6 per cent. While the total value of this trade has risen slightly from 16 crores in 1913–14 to 18 crores in 1925–26, the quantity has fallen from 1,000,000 to less than 900,000 tons.

My next point is that as trade stands to-day the London market is operating with much smaller stocks than was the custom pre-war. This is true not only of the shellac market, but of many other markets as well. In the old days, producers of primary raw materials sold their products chiefly to middlemen, who maintained stocks; while manufacturers and other consumers bought chiefly from stock. These

stocks were not necessarily individually very great, but, in the aggregate, they amounted to many weeks', or even months' supplies, according to the nature of the commodity. Nowadays, no middleman dare purchase for stock, as he has no confidence in future prices. The same tendency is also true of manufactured goods. The producer and the manufacturer are always finding that their goods are consumed hand-to-mouth; and the first indication of a falling-off of demand is when



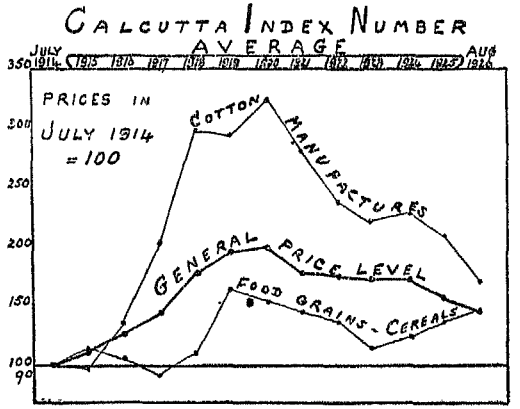
their output remains on their own hands. Hence the general desire on the part of both producers and manufacturers to turn out only such quantities of goods as are in immediate demand.

I now turn to describe a further phase of post-war trade conditions in India, namely, that a wide gap has developed between the prices which India obtains for her exported products and the prices she has to pay for imported manufactures. Ever since the great trade slump of 1921–22, India has had to pay for her imports proportionally higher values than she has obtained for her exports. This tendency is illustrated by the following diagram, which compares the prices which India obtained for her staple exports

in 1913–14 (on a basis of 100 for each), and again during 1919–20 and subsequent years, with the prices she paid for staple imports.

You will see how wide a disparity existed between the two sets of index numbers for five years after the war. It is only last year, in 1925–26, that they really draw closer together, indicating a return to more normal trade conditions.

In my next diagram I show this disparity in practical form, by comparing the prices which Calcutta

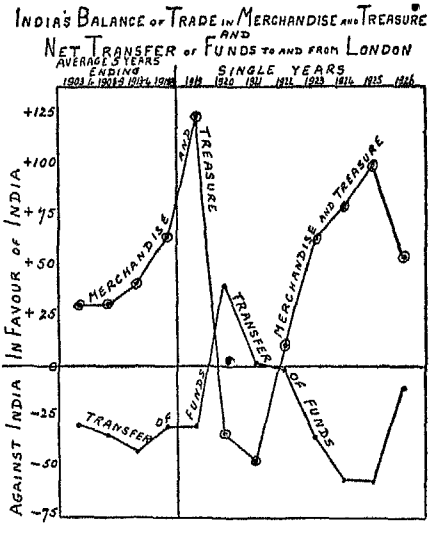


has obtained for the food-grains she produces with the prices she pays for cotton piece goods.

Here, also, you will observe a tendency of the two sets of prices to draw together during the last year or two. But even in August, 1926, the index number for cotton piece goods is still as high as 170, while the price of food-grains is only 148.

My last diagram illustrates India's trade balance before the war, and again yearly since 1919. The blocks above the horizontal line represent India's credits—i.e. the exports against which she secures credits in foreign markets. The blocks below the

horizontal line represent the debit side of the account, namely, the imports of merchandise and bullion which are paid for out of the foreign credits obtained on the exports. On the debit side is also shown the home charges—that is to say, the interest on British capital officially invested in Indian railways, canals, etc., and the other official remittances of the Government of India to the India Office. It is impossible, of course,



to calculate with any degree of accuracy the "invisible" exports and imports, such as private transfers of capital to India or private remittances abroad from India.

In 1920, India's exports of bullion exceeded her imports, and the small balance is shown on the credit side, above the horizontal line. In 1921, the remittance of funds to India exceeded the remittances from India, and this item, therefore, appears that year on the credit side. The details are as in the diagram above.

The point of special interest to us now is to observe the steady development of India's export trade during the last few years, culminating with 1925, when India's exports constituted a record. These exports are due to the fact that good harvests during recent years have increased India's exportable surplus. The question may well be asked: Why, then, did not India's imports increase proportionally? The answer to this question is that, owing to uncertainty as to the future course of prices, particularly of staple imports, such as cotton goods, sugar, iron, and steel, etc., India bought from year to year for immediate consumption only. Recently she has increased her purchases of sugar, and there are indications that India's demand for cotton piece goods is also increasing. The important thing to remember is that India is the biggest single market for British goods. If you in your turn buy Indian goods in preference to competing goods from foreign countries, you will thereby increase the purchasing power of the Indians, who are your best customers.

(*Lecturer:* H. A. F. LINDSAY.)

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